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Environmental Impact Report

Bank of Canton of California Headquarters

Final

EE 80.296
State Clearinghouse No. 80122303

Publication Date: March 26, 1982
Public Comment Period: March 26, 1982 through May 13, 1982
Public Hearing Date: April 29, 1982
Certification Date: July 15, 1982

● Solid dots at the beginning of each revised section, paragraph, figure or table indicate changes from the text of the Draft EIR.

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I. SUMMARY

A. PROJECT DESCRIPTION

The Bank of Canton of California proposes to construct a new headquarters office building in the Financial District of San Francisco. The sponsor's objectives are to provide more efficient space for its banking operations currently located in separate buildings on the site, to provide additional space for anticipated growth of the bank, and to provide rental office space.

The project site, about 16,500 square feet in area, is at the southwest corner of the intersection of Montgomery and Clay Streets and consists of Lots 1, 2, 3, 4, 29, 46 and 47, Assessor's Block 227. The present headquarters office and main branch of the Bank of Canton are located in five of the seven existing buildings on the site.

The project would be a 282-foot high, 18-story office building, including 17 floors of usable space, one mechanical penthouse floor and one basement level. The building would contain 230,440 gross square feet of office space. The main entrances to the banking hall and office tower would be located on Montgomery Street. The Commercial Street frontage would incorporate the Old Sub-Treasury Building (608-610 Commercial Street), a designated City Landmark, with upper stories of the office building set back 16 feet from the old building frontage. The Old Sub-Treasury Building would be restored as a proposed Pacific Heritage Museum containing about 9,000 square feet of space, including open space on the Sub-Treasury roof. The restoration would preserve and display interior elements of the Sub-Treasury, including the basement coin vault, columns, brick walls, and the steel and corrugated iron floor system. The museum, which would be open to the public, would be financially supported by the Bank of Canton. The museum would exhibit material on the art, culture and history of California immigrant groups from Asia and other Pacific regions.

A service entrance and off-street loading docks would be located on Clay Street. The ground floor would contain the main branch of the Bank of Canton. Because of elevation differences on the site, the main floor of the Pacific Heritage Museum in the Old Sub-Treasury Building would be about eight feet higher than the banking hall.

B. ENVIRONMENTAL EFFECTS

LAND USE AND ZONING

The 282-foot-tall project would comply with the 320-I and 400-I Height and Bulk Districts which apply to the site. The building length would be about 130 feet, 40 feet less than the permitted maximum. The diagonal dimension of 167 feet would be about 33 feet less than the permitted maximum of 200 feet. The 230,440-square-foot gross office floor area of the project would have a Floor Area Ratio (FAR) of 14:1. If the proposed museum floor area of 6,600 gross square feet is included, the project FAR would be 14.4:1, and would exceed the maximum 14:1 FAR permitted under Interim Controls now in effect. The project sponsor has requested exclusion of the Sub-Treasury floor area from gross FAR on the grounds that the landmark would be restored for public use, based on an interpretation of City Planning Code Article 10. This request is under review by the Zoning Administrator.

URBAN DESIGN, SHADOW AND WIND EFFECTS

The proposed project would be more visible than the present site development. From Chinatown, the project would be visible south of the 601 Montgomery Street building, obstructing some views of the lower portions of the Transamerica Pyramid. When observed from long-range viewpoints to the northeast, north and west, the project would not be a major visual focus because of the prominence of taller structures. The project would not be visible from the southern approaches to the City on the James Lick and Bayshore freeways or from Potrero Hill due to intervening structures.

The project, replacing existing low-rise structures on the site, would create more extended shadow patterns than exist at present. Project shadow patterns would partially overlap those cast by major structures in the area (601 Montgomery Street and the Transamerica Pyramid). The project would shade Redwood Park, east of the Transamerica Pyramid, in afternoon hours in spring and fall months. Wind speed ratios on Clay, Commercial and Montgomery Streets would be increased by the project, remaining in the moderate range.

CULTURAL AND HISTORIC RESOURCES

The project would include restoration of the Old Sub-Treasury Building, a designated City Landmark. Restoration would include development of a Pacific Heritage Museum, open to the public, with displays related to the history of the site and structure. The office tower would be set back 16 feet above the Sub-Treasury Building. This setback would reduce the visibility of the tower from Commercial Street in front of the Old Sub-Treasury. The project would require removal of about 400 square feet of the rear (northeast) corner of the Sub-Treasury structure, about 10 percent of the building, for the proposed office tower elevator core.

EMPLOYMENT, HOUSING AND FISCAL FACTORS

The project would result in the demolition of the existing buildings on the site, which include about 48,100 gross square feet of office and commercial space and 4,100 gross square feet of housing space (22 vacant residential hotel units). Upon completion, the project would result in a net increase of about 183,000 gross square feet of office space and a net loss of about 800 gross square feet of commercial space and 4,100 gross square feet of residential space. About 880 permanent jobs would be provided within the project. The project would require about 340 person-years of construction labor. About 530 additional labor years of employment would be generated in the Bay Area as a result of the multiplier effect of project construction. The net new office employment generated at the site would result in a demand for about 155 new housing units in San Francisco.

- The project sponsor would provide one-for-one replacement of the 22 residential hotel units on-site, consistent with Ordinance 330-81, Chapter 41 of the Administrative Code. The project sponsor has acquired a 50-year lease on a site at Ninth Avenue and Clement Street, San Francisco, and has engaged an architect to design a new residential hotel of 21 units for that site. The new units would be managed under a 30-year lease by the Chinese Community Housing Corporation (CCHC), a non-profit corporation. The terms of the lease to CCHC would assure that rents would be kept at affordable levels for low-income persons. Initial monthly rents would be $100.00 for a single room and $125.00 for a double room.

- Because development of the residential hotel proposed at Ninth Avenue and Clement Street would provide 21, rather than 22 units, the project sponsor would propose to pay to the San Francisco Residential Hotel Preservation Fund Account an amount equal to 40 percent of the cost of construction of one unit comparable to the units to be demolished at 621 Clay Street, plus a pro rata share of site costs, with a written request that the payment be used for rehabilitation or construction of residential units in Chinatown or North Beach.

TRANSPORTATION, CIRCULATION AND PARKING

The traffic volume percentage increase caused by the project on the freeway feeder streets, and on streets near the proposed project, above 1984 traffic levels, is estimated to be less than five percent on any of the freeway approach streets. The impact of the project would be an unmeasurable lessening of the Level of Service of traffic operation on the street system. The level of operation would not be decreased by more than three percent of the 1984 expected base conditions by project traffic.

The project would have a projected need for 2.2 loading spaces per hour. This demand would be met by the two proposed off-street spaces in compliance with the City Planning Code. The two spaces would also be consistent with loading space standards adopted in City Planning Commission Resolution No. 9286.

Project ridership during the p.m. peak hour would not increase transit loading by more than 0.3 percent on any non-Muni systems; this would be a statistically insignificant change. Of the 52 Muni lines serving the Downtown San Francisco area, 37 operate within a walking distance radius of 2,000 feet of the site. With trips to be generated by the cumulative development in the Downtown, it is estimated that 26 of these lines would operate during the p.m. peak hour in 1984 beyond maximum recommended capacity (defined as 150 percent of seated capacity). The project would contribute about 115 peak-hour trips to these lines, a less than one percent increase over 1984 base conditions.

CONSTRUCTION NOISE

Construction activities would temporarily increase noise levels in the site vicinity. The project would be expected to use a mat foundation which would not require pile driving. During construction all powered equipment other than impact tools, would be required to comply with the San Francisco Noise Ordinance, which limits noise emissions to 80 dBA at a distance of 100 feet. Construction noise levels would interfere with business activities in nearby office buildings, and with the KABL radio studio at 632 Commercial Street, adjacent to the site, and would disturb occupants of residential buildings west of the site. The radio studio is used intermittently for recording of commercials, and for live broadcast of a Sunday evening talk show.

C. MITIGATION MEASURES

Major mitigation measures proposed as part of the project include:

URBAN DESIGN

- The project would restore the Old Sub-Treasury Building, City Landmark No. 34, for public use, as a proposed Pacific Heritage Museum. This use would enhance pedestrian interest on Commercial Street.

- The proposed office tower would be set back 16 feet, behind the Commercial Street frontage of the Sub-Treasury to reduce the visual effect of the office tower on the Sub-Treasury facade, as viewed from Commercial Street.

- The proposed one-story portion of the banking hall at the Commercial - Montgomery Street corner would maintain the existing low-scale continuous street facade on Commercial Street.

- The project would include base, tower and top elements with varied three-dimensional treatment of windows and granite cladding, to create visual interest.

- The project would include mature street trees and sidewalk plantings on Montgomery, Clay and Commercial Streets. These could reduce pedestrian sidewalk space. These measures would be implemented in consultation with the Department of City Planning and the Department of Public Works to maintain adequate sidewalk pedestrian flows.

WIND

- The project would include mature street trees, planters or other small structures on Commercial or Clay Streets. This measure would act as windbreaks to reduce the moderate wind speed ratios generated by the project. These measures would be implemented in consultation with the Department of City Planning and the Department of Public Works to maintain adequate sidewalk pedestrian flows.

CULTURAL AND HISTORIC FACTORS

- The project would restore and incorporate, entirely for public use, the Old Sub-Treasury Building, City Landmark No. 34, located on the site of the first U.S. Branch Mint. About 400 square feet of the structure, not now visible from the street, would be removed to allow development of the office building core. The Sub-Treasury Building would house a Pacific Heritage Museum, which would display interior elements of the structure, including the coin vault, a decorative column, steel beam and corrugated iron floor system and interior brick walls. The Museum would also display exhibits pertaining to the art, culture and history of Asian and Pacific immigrant groups in California.

- Should evidence of cultural or historic artifacts of significance be found during project excavation, the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board would be notified. The project sponsor would select an archaeologist or other expert to help the Office of Environmental Review determine the significance of the find and whether feasible measures, including appropriate security measures, could be implemented to preserve or recover such artifacts. The Environmental Review Officer would then recommend specific mitigation measures, if necessary, and recommendations would be sent to the State Office of Historic Preservation. Excavation or construction which might damage the discovered cultural resources would be suspended for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate.

EMPLOYMENT, HOUSING AND FISCAL FACTORS

- The Bank of Canton would offer space in the project building to those tenants currently renting office space on-site, and would provide relocation assistance to those tenants who would be displaced by the project.

- The project sponsor has made a commitment to contribute to the City Housing Production Program investment pool. The pool is a shared equity program to reduce monthly housing payments for eligible San Francisco home purchasers. This housing assistance would be secured by a second lien mortgage on a proportional share of equity appreciation, for selected housing units in San Francisco. The sponsor would contribute $930,000 to this investment pool. This total is based on the net demand for 155 housing units expected to be generated by the project, at a $6,000 contribution per unit. The shared equity program is administered by the City Office of Housing and Community Development.

TRANSPORTATION, CIRCULATION AND PARKING

- The project sponsor would participate proportionately in whatever measures are adopted finally by the Board of Supervisors to contribute funds for transit development and improvement, to meet the peak transit demands caused by cumulative office development in the Downtown area.

- A transportation broker in the project management office would encourage transit use through the on-site sale of BART, Muni, and Golden Gate Transit passes to employees, and by distributing transit information. The broker would encourage employee carpool and vanpool systems, in cooperation with the non-profit RIDES for Bay Area Commuters, by providing a central clearinghouse for carpool information. An annual report on the activities of the broker would be submitted to the Transportation Planning Section of the Department of City Planning.

- The project sponsor would provide secure and safe bicycle and moped parking facilities to encourage the use of bicycles and mopeds by employees and messengers.

- During the construction period, truck movement would be planned to minimize peak-hour traffic conflicts. The project sponsor and construction contractor would meet with the Traffic Engineering Division of the Bureau of Engineering and with the Office of Environmental Review to determine feasible traffic mitigation measures to reduce traffic congestion during construction of this project, and other projects (including the 456 Montgomery Street and the Montgomery-Washington buildings).

- The project sponsor would require, by contract, that the general contractor provide off-street parking for construction workers on the project site or at an off-site location, to minimize demand for on-street parking by construction workers.

- Paving, landscaping and structures in the sidewalk area would be designed (subject to Department of Public Works approval) to minimize interference with pedestrian traffic, and to coordinate with potential wind effect mitigation measures.

- The building would have "eyebolt" fixtures, suitable for suspending Muni trolley wires, on the Montgomery and Clay Street frontages.

- The Bank would implement a flexible time system (flex-time) for its employees consistent with the Bank of Canton's operational needs. Upon project completion, with the help of the Department of City Planning, the project sponsor would encourage tenant firms to implement a flex-time system for employee working hours. (Flex-time is designed to reduce peaks of congestion in the transportation system.)

- The project sponsor would conduct a survey, at a time suggested and in accordance with methodology approved by the Department of City Planning, to assess actual trip generation patterns of project occupants and actual pick-up and drop-off areas for car pools and van pools. The project sponsor would make this survey available to the Department. Alternatively, at the request of the Department, the sponsor would provide an in-lieu contribution toward an overall City-conducted transportation survey for the Downtown area.

AIR QUALITY

- During dry-season excavation, the general contractor would sprinkle unpaved demolition and construction areas with water at least twice a day to hold down dust. This would reduce particulate emissions (dust) by about 50 percent.

- The general contractor would maintain and operate construction equipment in such a way as to minimize exhaust emissions.

CONSTRUCTION NOISE

- The general contractor would construct barriers around the site, and around stationary equipment such as compressors, to reduce construction noise by as much as five dBA.

- The general contractor would locate stationary equipment in pit areas or excavated areas to serve as noise barriers to the extent possible.

● - The project sponsor and contractor would reduce or suspend operations as necessary during one hour pre-taping programs, if a mutually agreeable time were agreed upon, or the project sponsor would pay up to $100 in expenses per session for KABL to move its recording operation to another site. Upon a 24-hour notification by KABL, the sponsor would cease construction activities during taping of spot commercials. The project sponsor would install barriers over the top-floor skylights in order to minimize the danger of falling material during construction and reduce the transmission of construction noises. Similar barriers would be provided on the 635 Clay Street building skylight.

- Construction activities would be limited to hours between 7 a.m. and 7 p.m. to reduce disturbance to residents of buildings west of the site.

ENERGY

- Wherever possible, office suites would be equipped with individual light switches, time-clock operation and fluorescent lights to conserve electric energy. A centralized management computer system would monitor off-hour (evening and weekend) heating and air-conditioning use.

- The project would comply with the formerly required Federal Energy Building Temperature Restrictions in the operation of heating, ventilating and air-conditioning (HVAC) equipment. The HVAC system would be equipped with an economizer cycle to use outside air for cooling, where appropriate.

GEOLOGY, SEISMICITY AND HYDROLOGY

- A detailed foundation and structural design study conducted for the building by a California-licensed structural engineer and a California-licensed geotechnical consultant would provide recommendations for final design and construction of the project. The recommendations would be followed by the project sponsor.

- The project sponsor would post a surety bond, if required by the San Francisco Department of Public Works, before issuance of a permit to excavate. Such a bond would protect the City against damages to City-owned sidewalks, streets and utilities.

- The project sponsor would require the project contractor and sub-contractors to obtain a Faithful Performance and a Payment Bond, if proper financial capability is not evident, to be responsible for any damage to the Old Sub-Treasury Building, a designated City Landmark, by dewatering of the foundation or other act which might result from excavation.

- Groundwater observation wells would be installed for monitoring the level of the water table and other instruments would be emplaced to monitor potential settlement and subsidence. The City would require a lateral and settlement survey to monitor any movement or settlement of surrounding buildings and adjacent streets during the dewatering. Control lines and benchmarks would be established for monitoring horizontal and vertical movement. Costs for the survey and any necessary repairs to services under the streets would be borne by the contractor. The Environmental Review Officer and President of the Landmarks Preservation Advisory Board will be advised of findings during the monitoring of water table levels, settlement and subsidence.

- If, in the judgement of City engineers, unacceptable subsidence occurs during the construction, groundwater recharge would be begun to halt the settlement. This might cause a delay in construction.

- Groundwater pumped from the site would be retained in a holding tank to allow suspended particles to settle, if this is found necessary by the Industrial Waste Division of the Department of Public Works, to prevent sediment from entering the storm drain/sewer lines.

EMERGENCY RESPONSE PLAN

- An evacuation and emergency response plan would be developed by project-sponsor or building-management staff, in consultation with the Mayor's Office of Emergency Services, to insure coordination between the City's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. The project's plan would be reviewed by the Office of Emergency Services and implemented by building management before issuance by the Department of Public Works of final building permits.

D. ALTERNATIVES TO THE PROPOSED PROJECT

Alternative 1, the no-project alternative, would retain the existing structures on the project site. Environmental conditions would remain as at present, and the Old Sub-Treasury Building would not be restored. The sponsor has rejected this alternative because it would not allow development of the site with a unified design or provide a reasonable return on investment.

Alternative 2 would be a mixed-use project conforming to the City's Downtown Interim Controls, with 14:1 office FAR and about 40,000 gross square feet of housing which would qualify for bonus FAR. The alternative would be taller and more visible than the project and would cast longer shadows. Traffic generation and related impacts would be about 15 percent greater than those of the project. The alternative would supply about 30 percent of the housing demand expected to be generated by the office portion of the alternative. The sponsor has rejected this alternative because provision of adequate parking for residential uses on the site would preclude restoration of the Old Sub-Treasury Building, and because, under state banking laws, the Bank of Canton may not directly develop or own residential property.

Alternative 3 would be an office structure with a basic FAR of 12:1 which would conform with development controls recommended in the May 1981 Department of City Planning document, Guiding Downtown Development (GDD). The alternative would contain about 198,000 gross square feet of office space, and would be about 250 feet high, about 30,000 square feet smaller and 30 feet shorter than the project. The lower height of this alternative would reduce shadow and visual effects compared to those of the project. Traffic generation would be about 15 percent less than that of the project. The sponsor has rejected this alternative because it is less economically feasible than the project and would proportionately increase the cost of restoration of the Old Sub-Treasury Building.

Alternative 3A would be a combined office-residential structure consistent with GDD. It would contain 12:1 FAR for office use and 3:1 for residential use. It would be about 320 feet in height and include about 50,000 square feet of residential space. (The proposed 250-foot height limit on the western half of the site would preclude development of the maximum 5:1 FAR for residential use proposed in GDD.) The visual and shadow effects would be similar to Alternative 2, above. The housing provided would be about 40 percent of the approximately 133-unit demand expected to be generated by the office portion of the alternative. Traffic generation would be about seven percent higher than for the project. The sponsor has rejected this alternative because providing parking on the site for residential uses would preclude restoration of the Old Sub-Treasury Building and because, under state banking laws, the Bank of Canton may not directly develop or own residential property.

Alternative 4 would retain the residential hotel building at 621 Clay Street. Under this alternative, an L-shaped portion of the site could be developed with about the same floor area as the project. The Bank of Canton has rejected this alternative because of extra costs and smaller floor sizes that would proportionately increase the cost of restoration of the Old Sub-Treasury Building.

Alternative 4A would retain both the residential hotel and the Old Sub-Treasury Building. The site lots fronting Montgomery Street would be developed with a 400-foot building with a total floor area about 25 percent smaller than that of the project. Shadow impacts would be greater than those of the project. Other effects would be reduced in proportion to the reduction in floor area. The Bank of Canton has rejected this alternative because of its inefficient floor size, reduced banking hall size, and lower total floor area, and the proportionate increase in cost of restoration of the Old Sub-Treasury Building.

Alternative 4B would preserve the entire Old Sub-Treasury Building. The alternative would be similar to the proposed project, except that the building core would be situated to avoid removal of the northeast corner of the Old Sub-Treasury Building, proposed in the project. This structural change would require larger beams and would increase the overall height of the project about 20 feet. The alternative would cast longer shadows, but other effects would be similar to those of the project. The project sponsor has rejected this alternative because of the extra costs and creation of inefficient floor areas, and because the project as proposed would preserve all but about 10 percent of the Old Sub-Treasury Building.

Alternative 5 would be similar to the proposed project, but the mechanical floor would include setbacks to reduce the appearance of bulk of the structure, make the top of the tower distinct from other high-rise structures in the area, and respond to proposed Urban Design Policies in GDD. The central portion of the tower would 290 feet high, compared to 282 feet for the project. This alternative would shade a small portion of Portsmouth Square in morning hours in mid-March and mid-September. Other environmental effects would be similar to those of the project.

● After publication of the Draft EIR and prior to certification, this alternative has become the proposed project because, in the sponsor's opinion, its positive visual effects justify the additional structural costs.

II. PROJECT DESCRIPTION

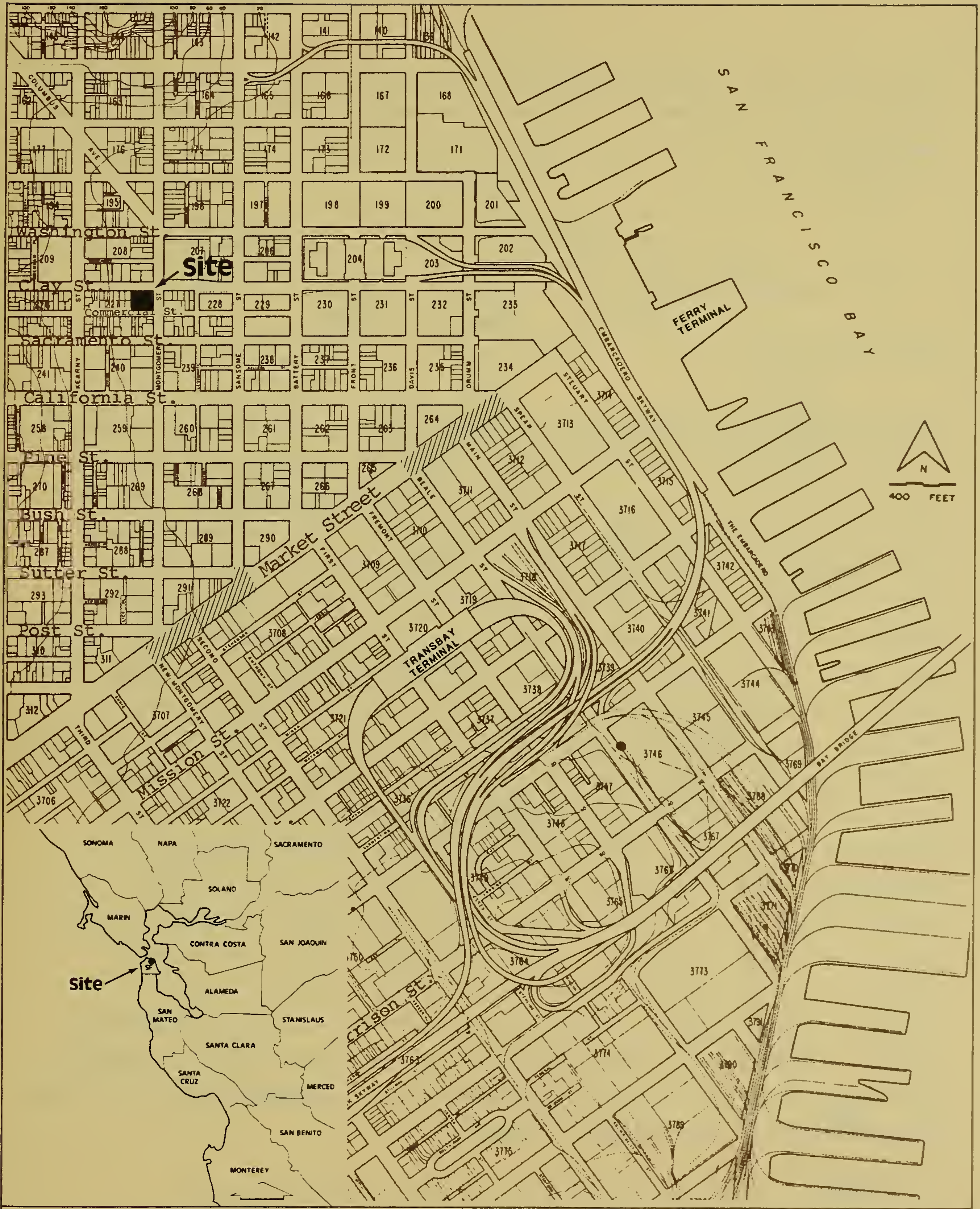
A. SPONSOR'S OBJECTIVES

The Bank of Canton of California, a San Francisco-based corporation, proposes to construct a new headquarters office building in the Financial District of San Francisco. The Bank of Canton of California has had its headquarters at the project site since 1937.

The sponsor's objectives are to provide more efficient space for banking operations which are currently located in five separate buildings on the site, and to provide additional space for anticipated growth of the Bank. The Bank would develop the site in a unified design theme that would identify its headquarters offices, and provide rental office space to other users to realize a return on its investment. Project architects are Skidmore, Owings and Merrill, of San Francisco. The sponsor also intends to restore City Landmark No. 34, the Old Sub-Treasury Building, on the site at 608-610 Commercial Street. The restoration would include development of the entire Old Sub-Treasury for public use as the Pacific Heritage Museum. Architects for the restoration are Charles Hall Page and Associates, of San Francisco. The proposed museum would be financially supported by the Bank of Canton, and would include exhibits on the art, culture and history of California immigrant groups from the Asia and the Pacific regions, and on the history of the site and structure.

B. PROJECT LOCATION

The project site is the approximately 16,500-square-foot southwest corner of the intersection of Montgomery and Clay Streets, consisting of Lots 1, 2, 3, 4, 29, 46 and 47, in Assessor's Block 227. It occupies the entire 120-foot frontage of Montgomery Street between Clay and Commercial Streets, and additional frontages of 137 feet on each of the latter streets (see Figure 1).



▨ Bart/Muni Metro Stations

Source: Department of City Planning,
San Francisco

FIGURE 1: Project Location

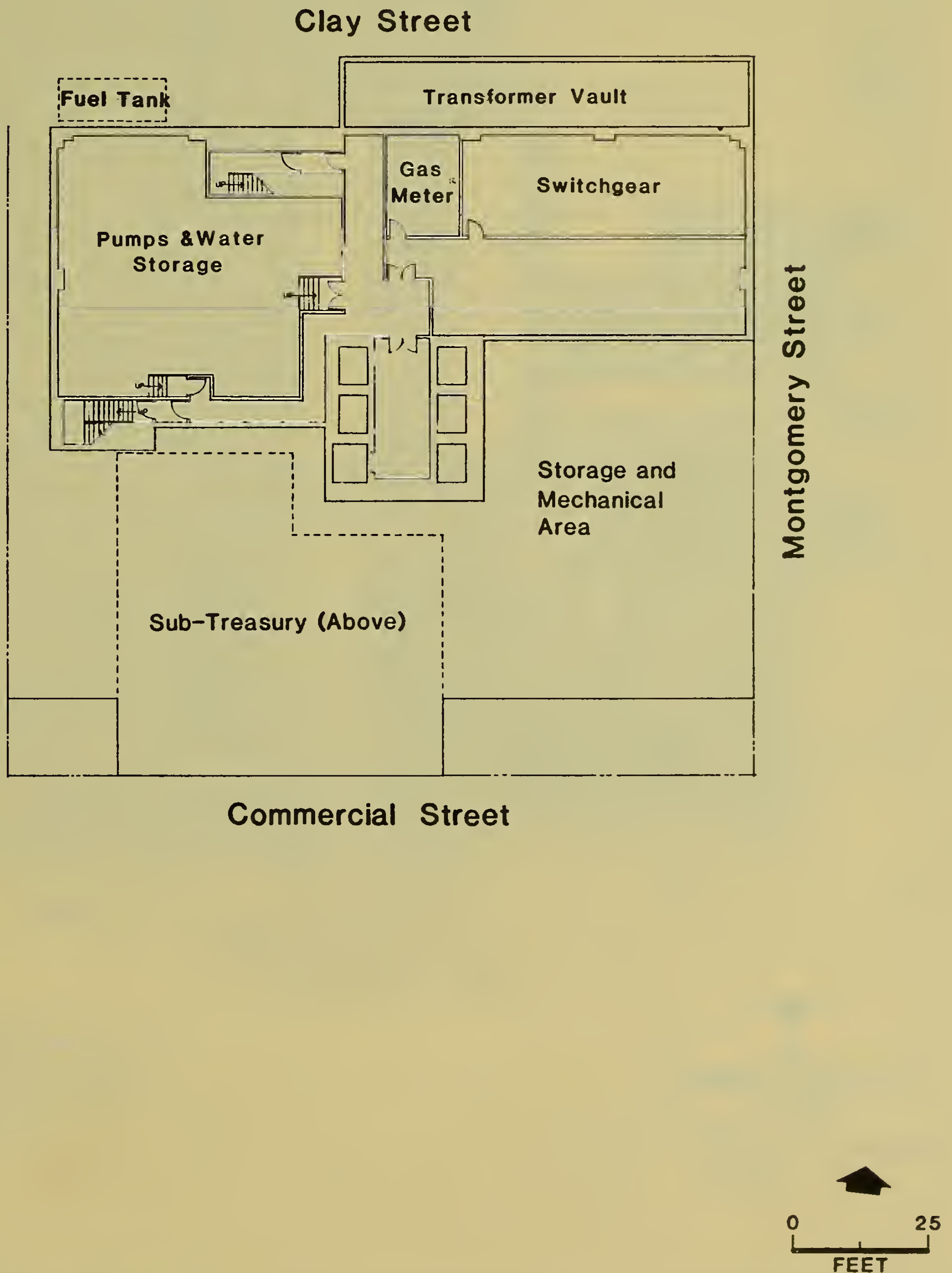
The site is near the northern edge of the Financial District, and adjoins the eastern edge of Chinatown. It is one block south of the Transamerica Pyramid, two blocks south of the Jackson Square Historic District, and six blocks north of Market Street.

C. SITE AND BUILDING PLAN

OFFICE BUILDING

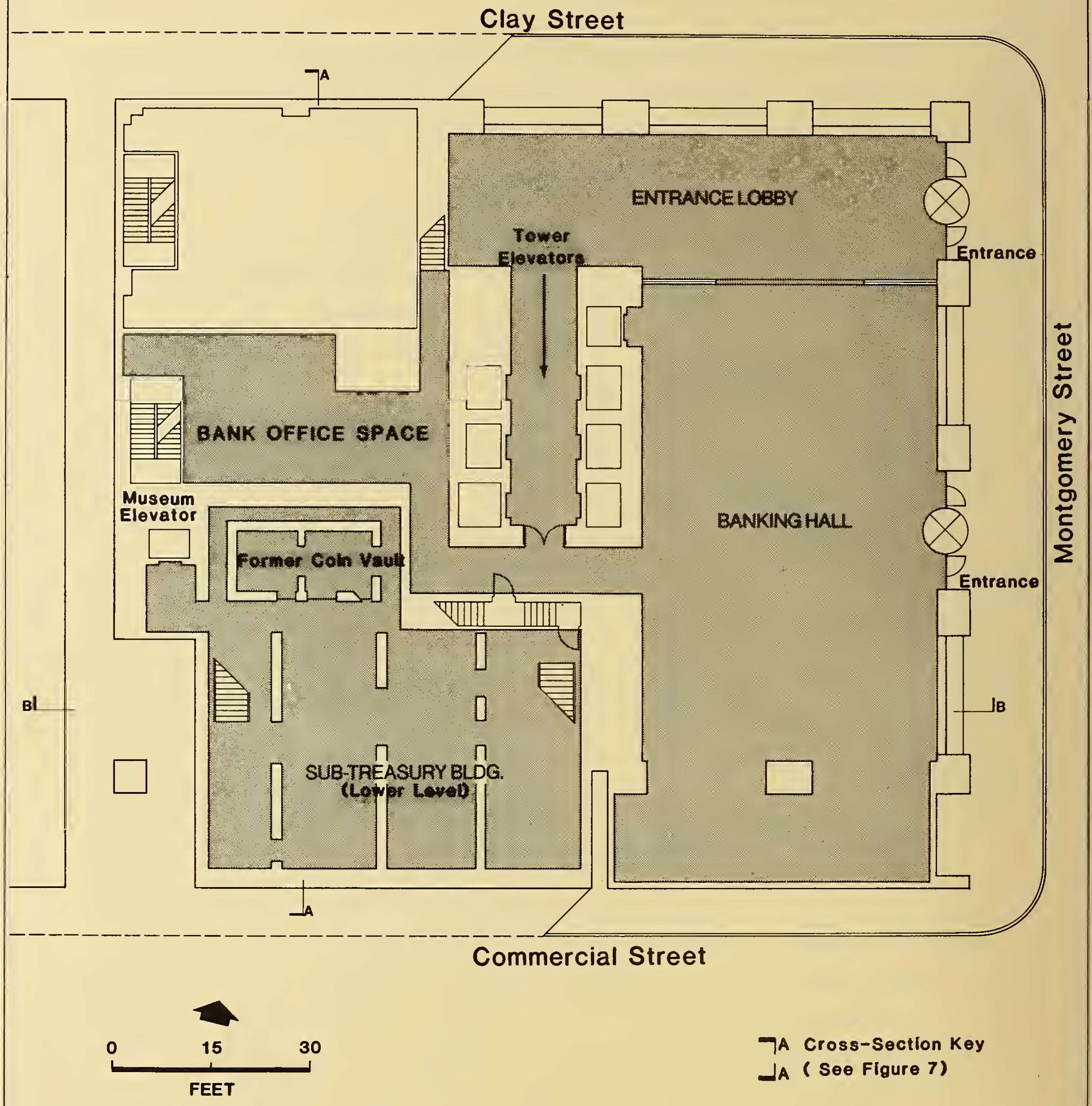
The proposed office building would be 282 feet and 18 stories tall, including 17 floors of banking, museum, and office space and one mechanical penthouse floor, plus one basement level. The basement level would include mechanical and electrical equipment (see Figure 2, page 18). The Montgomery Street level would contain the main branch of the Bank of Canton and the office lobby. The main entrances to the banking hall and office lobby would be on Montgomery Street (see Figure 3, page 19). A one-story portion of the banking hall would extend from the south wall of the office tower to Commercial Street directly east of the Old Sub-Treasury along 45 feet of Commercial Street frontage, at the Montgomery Street corner (see Figure 11, page 28). A service entrance and off-street loading dock with two truck bays would be located on Clay Street. The loading level would be about 10 feet higher than the Montgomery Street level, because of elevation differences between the Montgomery Street frontage and the westerly portions of the site (see Figure 4, page 20). The second floor would contain Bank of Canton office space (see Figure 5, page 21). Floors 3 through 17 would contain about 13,800 gross square feet of office space each (see Figure 6, page 22). (Floors 3 through 5 would be served by an additional elevator and would be smaller in usable area. (The floor levels of the restored Old Sub-Treasury building would be at different elevations than the corresponding levels of the office structure. (See Figure 7, page 23.)

The building would contain 230,440 gross square feet of floor area (190,000 net square feet) exclusive of basement and mechanical levels. The project height of 282 feet would be 38 feet or 118 feet lower, respectively, than the maximum permitted heights of 320 feet and 400 feet, the two height limits on the project site (see Figures 8 and 9, Elevations, pages 24 and 25,



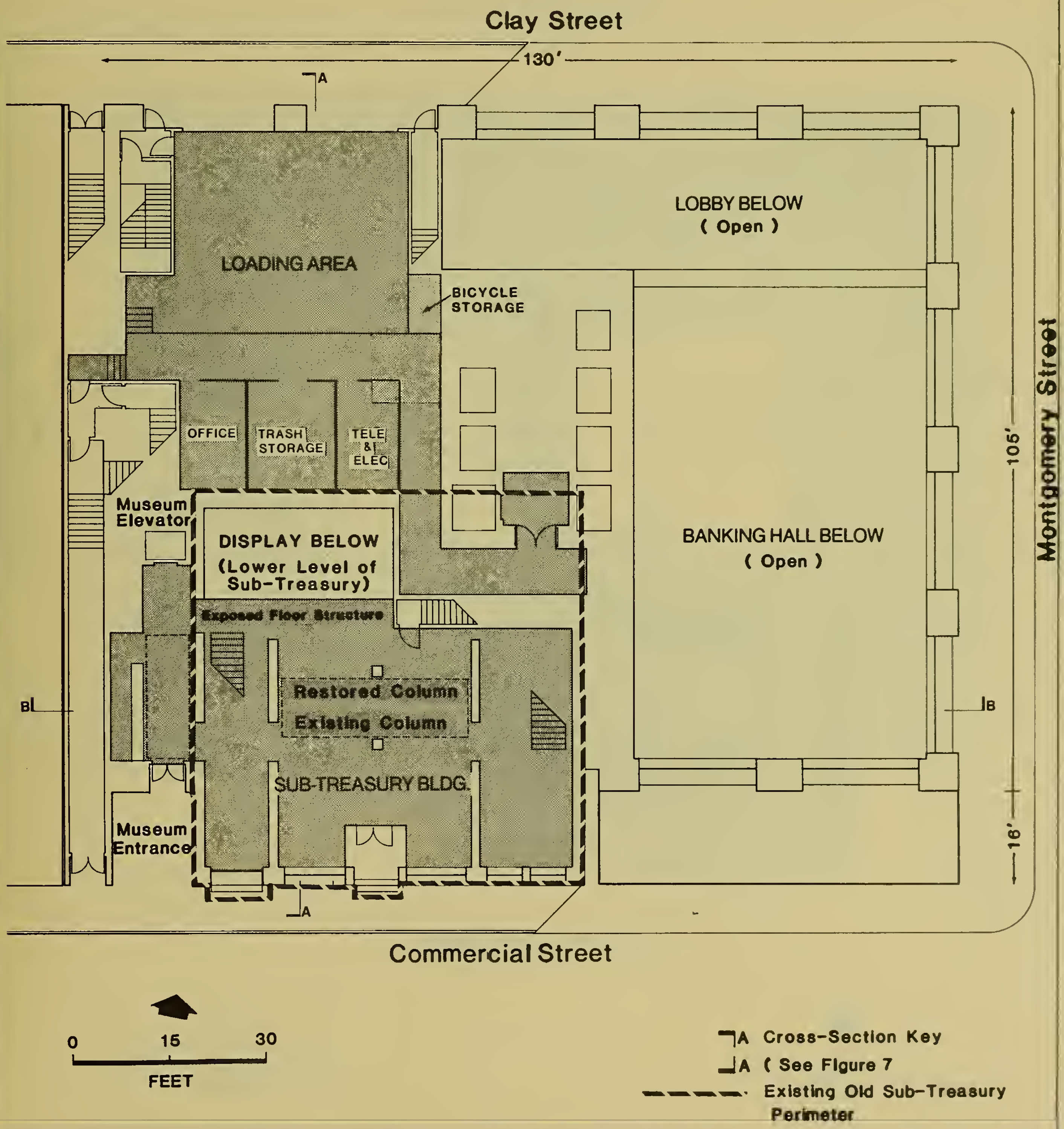
SOURCE: Skidmore, Owings & Merrill

FIGURE 2: Basement Plan



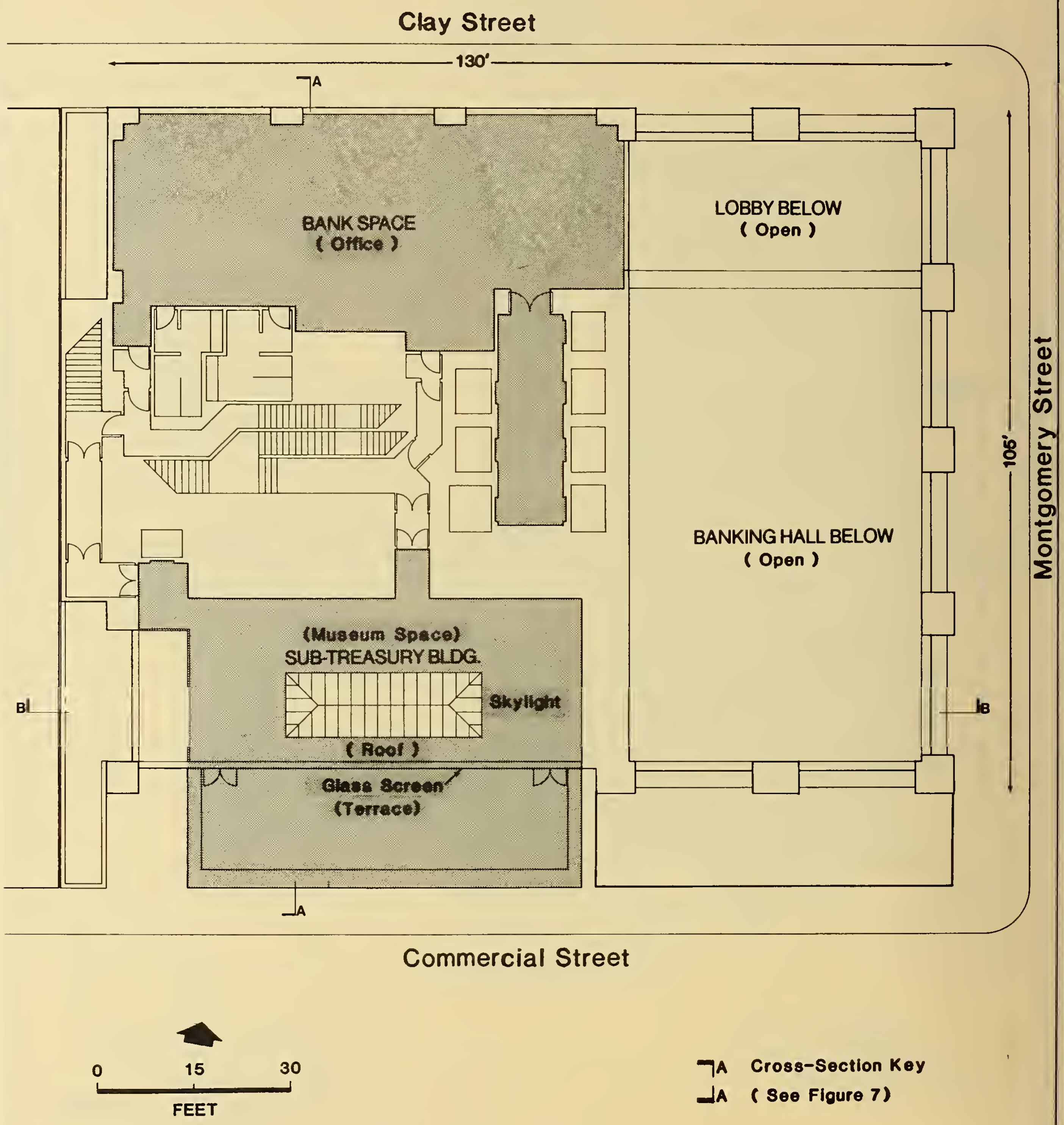
SOURCE: Skidmore, Owings & Merrill

● FIGURE 3: Montgomery Street Level Plan (Revised)



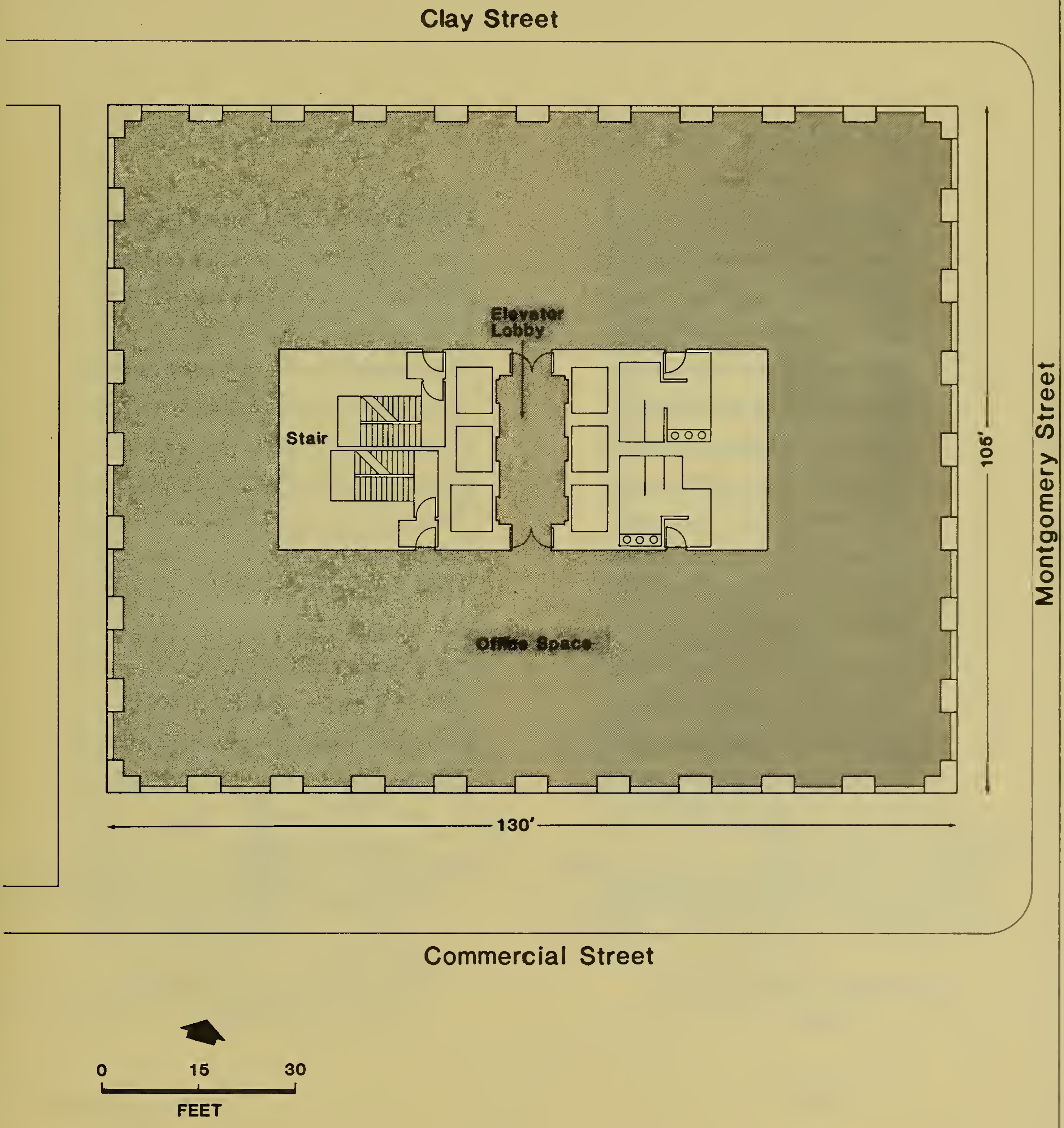
SOURCE: Skidmore, Owings & Merrill

● FIGURE 4: Sub-Treasury Building and Loading Level Plan (Revised)



SOURCE: Skidmore Owings & Merrill

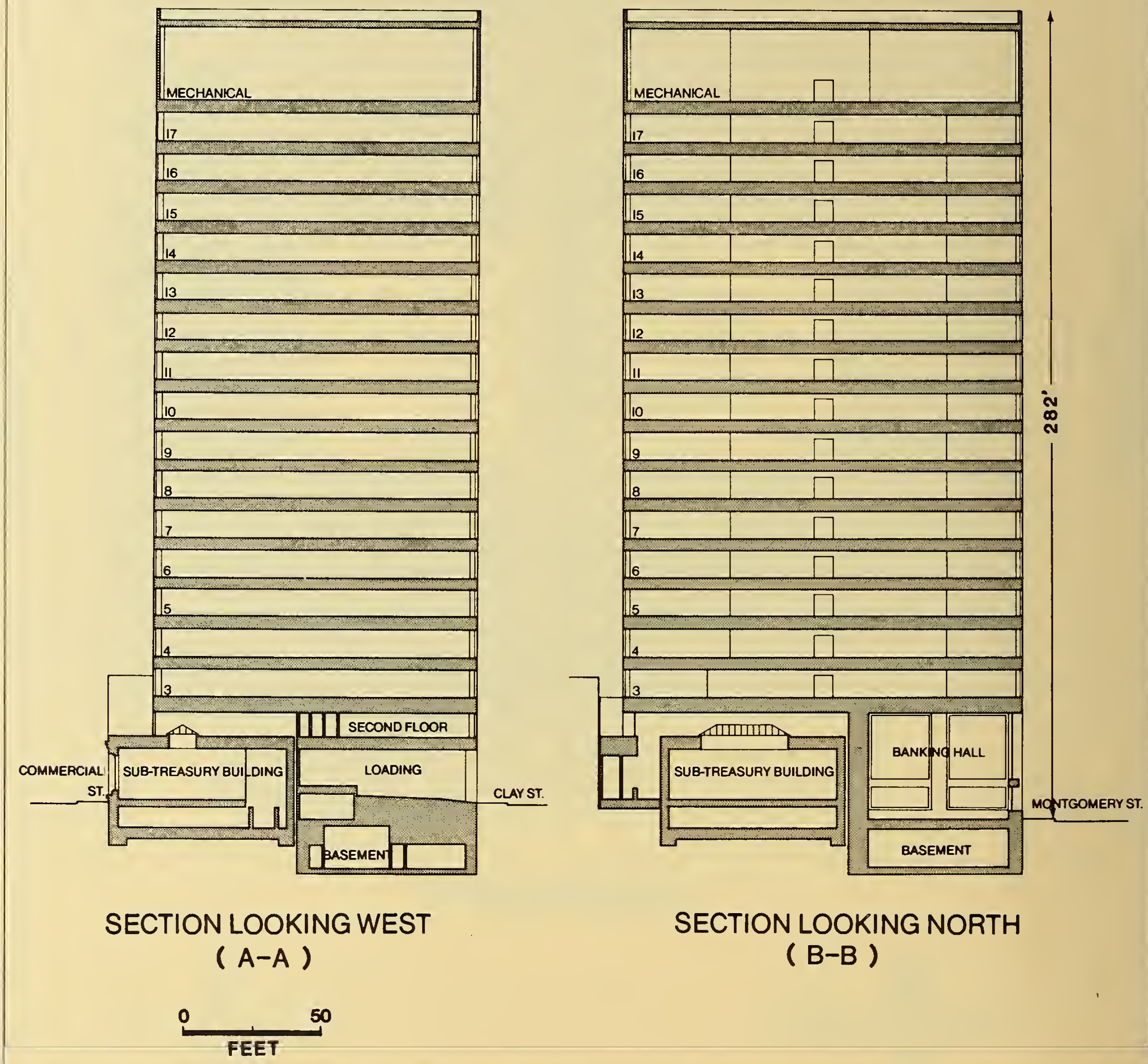
FIGURE 5: Second Floor Plan



SOURCE: Skidmore, Owings & Merrill

FIGURE 6: Typical Floor Plan (6-17)

NOTE: Floors 3-5 would have additional elevator.

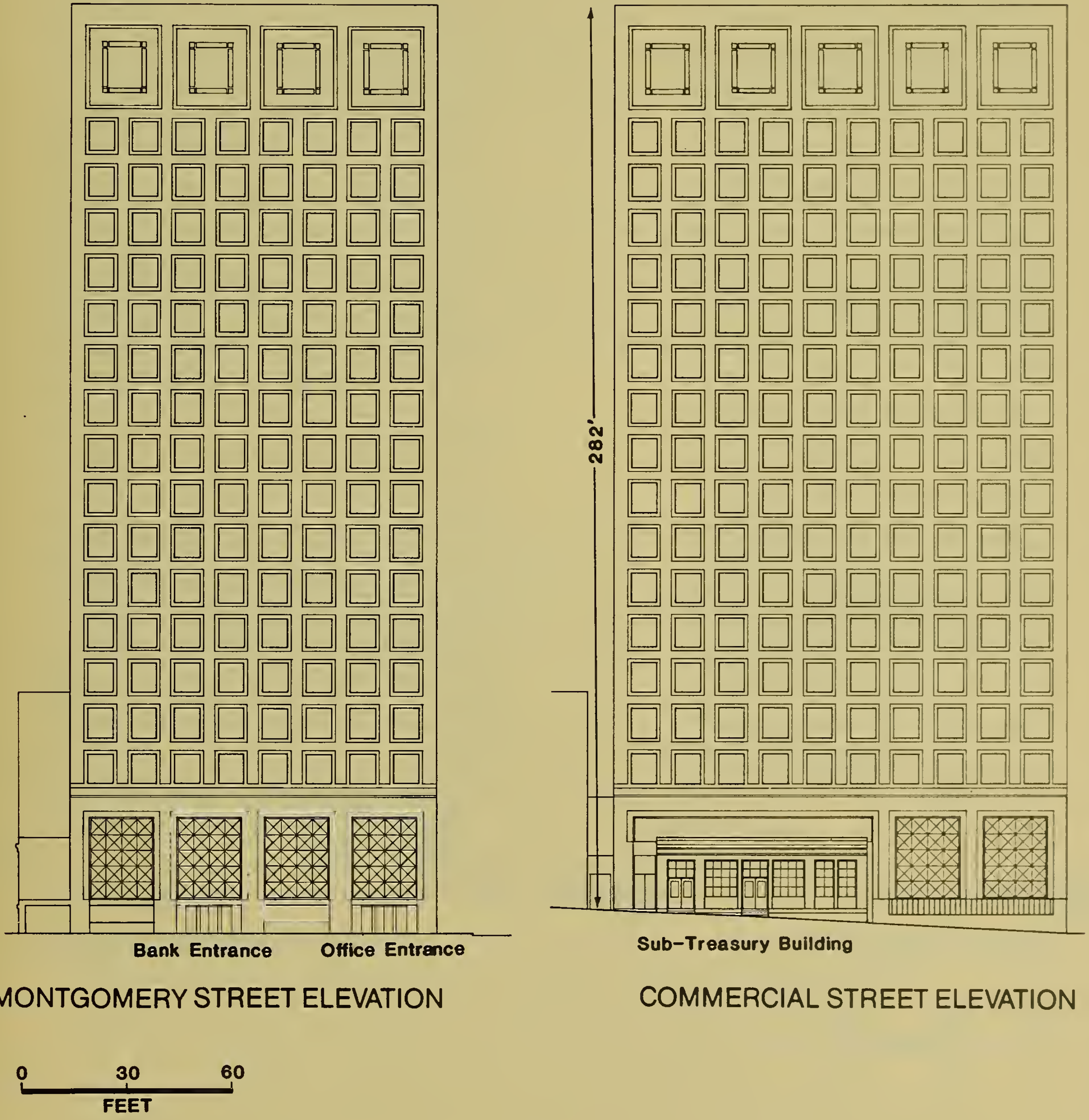


SECTION LOOKING WEST
(A–A)

SECTION LOOKING NORTH
(B–B)

SOURCE: Skidmore, Owings & Merrill

FIGURE 7: Building Sections

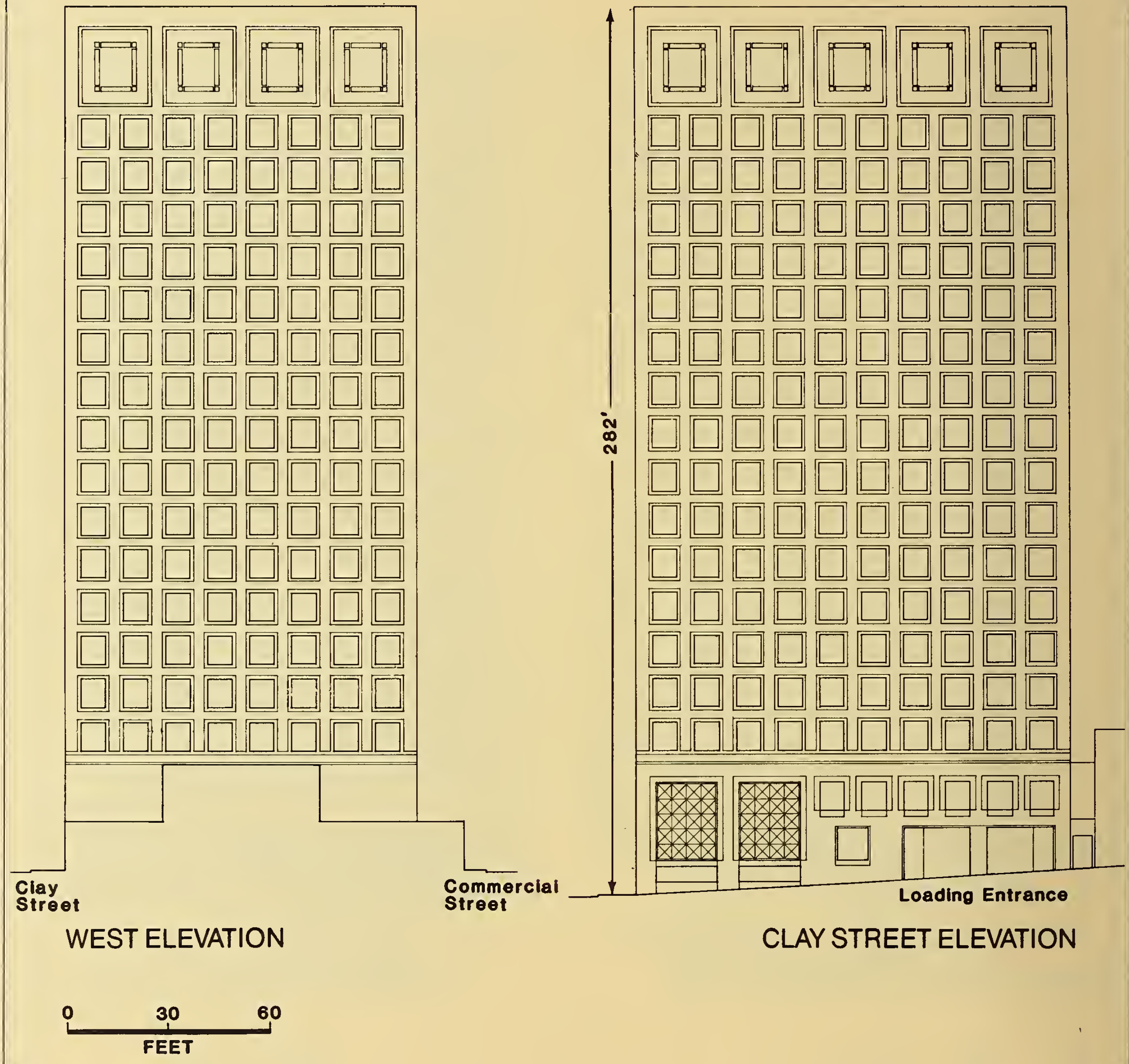


MONTGOMERY STREET ELEVATION

COMMERCIAL STREET ELEVATION

SOURCE: Skidmore, Owings & Merrill

FIGURE 8: Commercial Street and Montgomery Street Elevations



SOURCE: Skidmore, Owings & Merrill

FIGURE 9: Clay Street and West Elevations

and Figure 15, Planning Code Height and Bulk Districts, page 37). The building length of about 130 feet would be about 70 feet less than the maximum permitted 200 feet, and the maximum diagonal dimension of about 167 feet would be about 33 feet less than the maximum permitted diagonal dimension of 200 feet (applicable above a height of 150 feet).

The granite-clad base element of the tower would include recessed window grills in the banking hall and lobby area. The tower window elements would also be recessed, and differentiated with two shades of granite. The top element, surrounding the mechanical penthouse, would also include a pattern of recessed surface details (see Figures 8 and 9, pages 24 and 25, and Figures 10 and 11, pages 27 and 28).

OLD SUB-TREASURY BUILDING

The project would include restoration of the Old Sub-Treasury Building at 608-610 Commercial Street, City Landmark No. 34. The upper floors of the proposed office tower would be set back about 16 feet from the Commercial Street frontage of the old building (see Figures 8 and 11, pages 24 and 28); this building is approximately square in plan, 60 feet on a side. The Sub-Treasury, containing about 7,200 gross square feet of space, would be restored for public use as the Pacific Heritage Museum. The museum would contain about 6,600 square feet of space in the basement and street levels, and 2,400 square feet on the roof level, including open space. The museum would include two levels of the Sub-Treasury Building for exhibits (see Figures 3 and 4, pages 19 and 20), and space on the Sub-Treasury roof for museum use and open space (see Figure 5, page 21). In addition to art and cultural exhibits, the museum would display original elements of the structure, including brick walls, a decorative cast-iron columm, the steel beam and corrugated iron floor system, and the basement-level coin vault. Except for proposed reproduction of one decorative column, removed during post-earthquake reconstruction of the Old Sub-Treasury Building, all these architectural elements are now present in the structure; these elements would remain in place. Figures 3 and 4 indicate locations of the coin vault and the decorative columns. A portion of the main floor above the coin vault would be exposed to display the floor system.

Because of structural and safety considerations, the existing Sub-Treasury roof and skylight would be replaced. New stairs and emergency exits would also be provided, as well as an elevator for handicapped access to the museum from the Commercial Street level (see Figure 3, page 19). Office building elevator core space would require removal of the rear, northeast corner of the

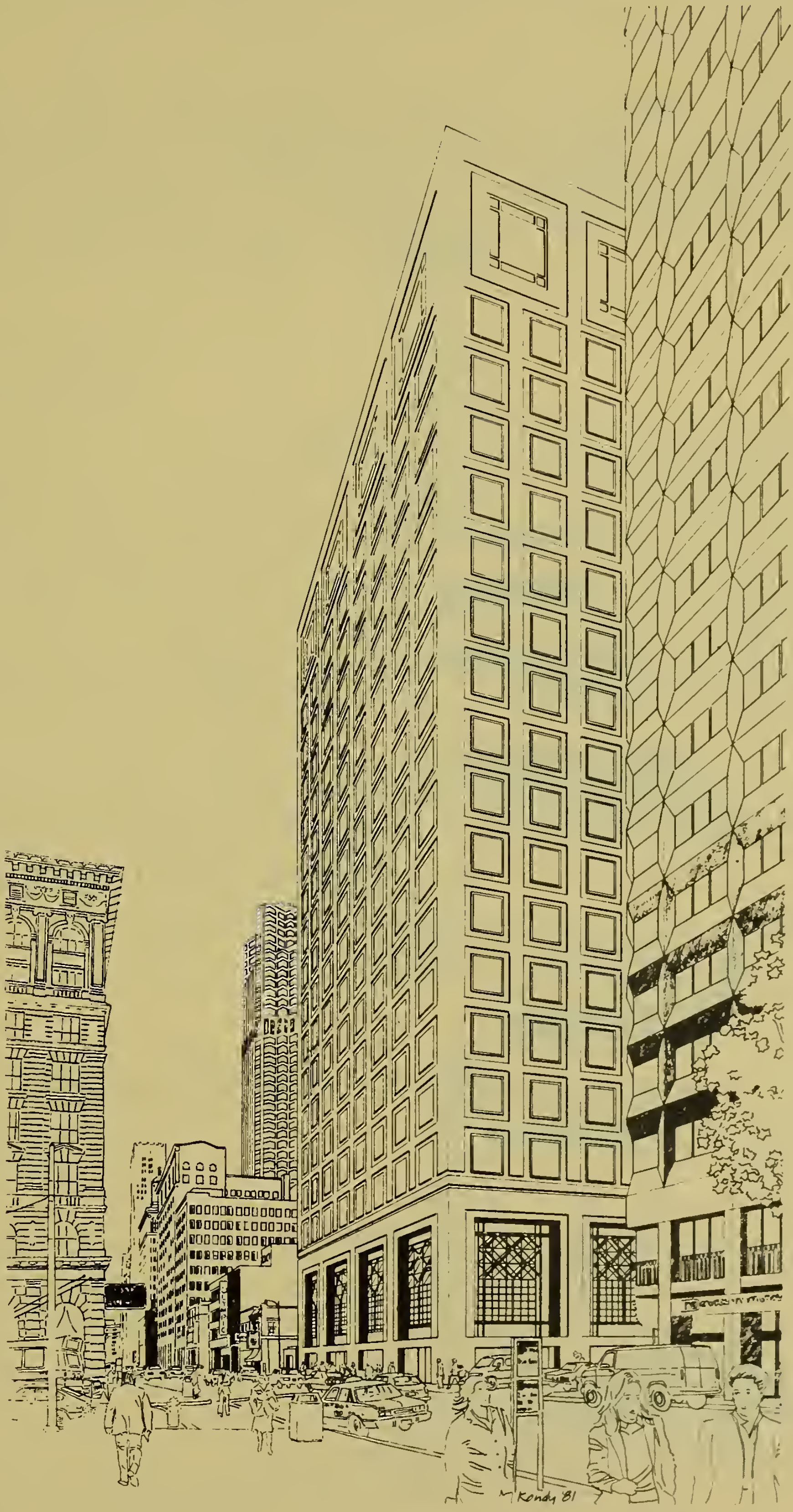


FIGURE 10: View of Project from East Side of Clay and Montgomery Streets Looking South

SOURCE: Skidmore, Owings & Merrill

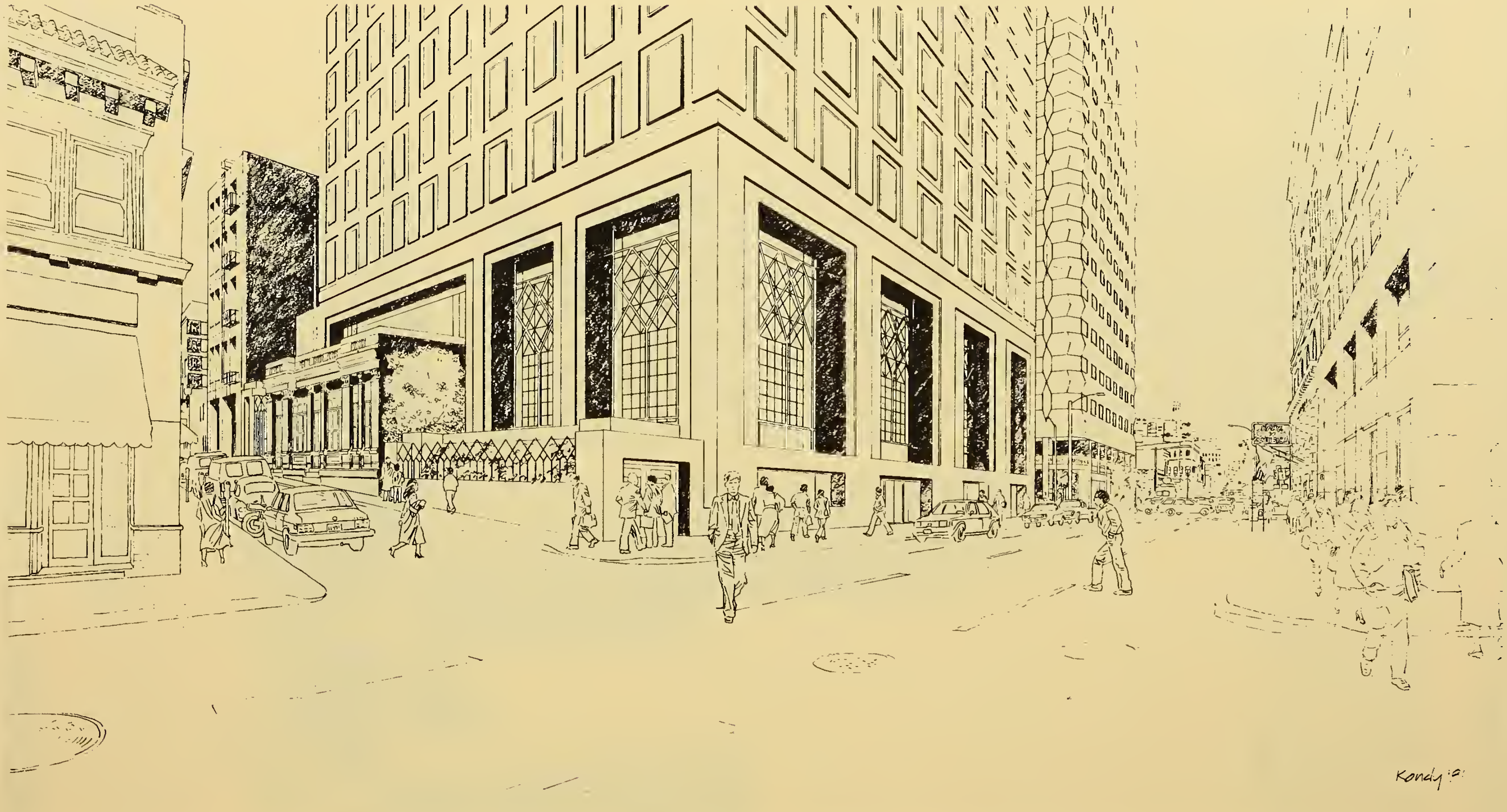


FIGURE 11: View of Project from East Side of Commercial and Montgomery Streets Looking Northwest

SOURCE : Skidmore, Owings & Merrill

Sub-Treasury Building (see Figure 4, page 20). Because of the elevation difference between the east (Montgomery Street) frontage and the west portion of the site, the museum and service area would be about six to ten feet higher than the banking hall (see Figure 7, page 23).

D. PROJECT OCCUPANCY

The Bank of Canton would initially occupy about 29,150 gross square feet, about 7,000 square feet more than it currently occupies on the site; the Bank's space would be about 13 percent of the gross floor area of the project. About 200,000 gross square feet would be occupied by other tenants. The Bank of Canton expects that it would eventually occupy a larger portion of the building. No other tenants are secured at this time. Tenants are expected to be legal, financial, real estate, and other professional firms.

During the construction period, the Bank of Canton would temporarily relocate its 65 employees currently at the project site, to leased space at 636 Clay Street, opposite the site, and to office space at its Oakland branch, at 900 Webster Street. A total of 65 bank employees would occupy the project initially.

E. PROJECT SCHEDULE, COSTS AND APPROVAL REQUIREMENTS

PROJECT SCHEDULE

Environmental review and detailed project design are scheduled for completion in 1982. Demolition and site clearance are anticipated to require approximately three months; excavation three months; foundation preparation 2-1/2 months; steel erection five months; and exterior and interior finishing 13 months. Interior finishing would be completed within 27 months from the beginning of demolition. Initial project occupancy is scheduled for early 1984 with full occupancy expected in late 1984./1/

COST

Project development costs would be about $36 million in 1981 dollars, including $2 million for land, $1.5 million for design, engineering and environmental analysis, $24 million for construction industry including about $2 million for preservation and restoration of the Old Sub-Treasury Building and $8.5 million for interim financing and miscellaneous costs. Office space is expected to rent for an average of $30 per net square foot per year (in 1981 dollars)./2/

NECESSARY APPROVALS

An application for environmental evaluation was filed in October 1980, and determination that an Environmental Impact Report (EIR) was required was made in December 1980. Issues which were considered to require no further consideration or discussion as a result of the initial environmental evaluation include operational noise and biota (see Appendix AA, pages 244-250). Therefore, this Draft EIR (DEIR) does not discuss these issues.

Following public review of the EIR, public hearing and certification of the report as complete and accurate by the City Planning Commission, the following approvals would be necessary for the project:

Under its current policy of Discretionary Review of all downtown high-rise buildings during the period of Interim Controls, the City Planning Commission would review the building design and its environmental context and adopt a resolution approving, approving with conditions, or disapproving the project./3/

The Planning Commission would consider a Certificate of Appropriateness (Section 1006 of the Planning Code), required for exterior alterations to a designated City landmark, in this case the Old Sub-Treasury Building. (The Landmarks Preservation Advisory Board, after review of project plans, on January 20, 1982 recommended approval of a Certificate of Appropriateness for the project.) The Planning Commission would consider this matter, including the Board's recommendation, at the Discretionary Review hearing for the project. Because the project would demolish the 22-unit residential hotel at 621 Clay Street, the Planning Commission would also review a Permit to Convert, under the Hotel Unit and Apartment Unit Conversion and Demolition Ordinance (Ordinance 330-81, Chapter 41, San Francisco Municipal Code). This ordinance requires replacement of up to 100 percent of demolished residential hotel units.

If these approvals are granted, the project sponsor would obtain demolition, site, building, fire, electrical and related permits from the Central Permit Bureau of the Department of Public Works.

NOTES - Project Description

/1/ Teri Fowler, Dinwiddie Construction Co., letter, August 24, 1981.

/2/ Bank of Canton of California, August 7, 1981, Information for Environmental Assessment of the Proposed Bank of Canton of California Building.

/3/ City Planning Commission Resolution No. 8474, January 17, 1980. Board of Supervisors Ordinance 240-80, June 1, 1980, established interim limitations on use of floor area bonuses for office uses, until July 1, 1981. Floor area bonuses may still be granted for residential or hotel uses. This ordinance was subsequently extended until March 1, 1983.

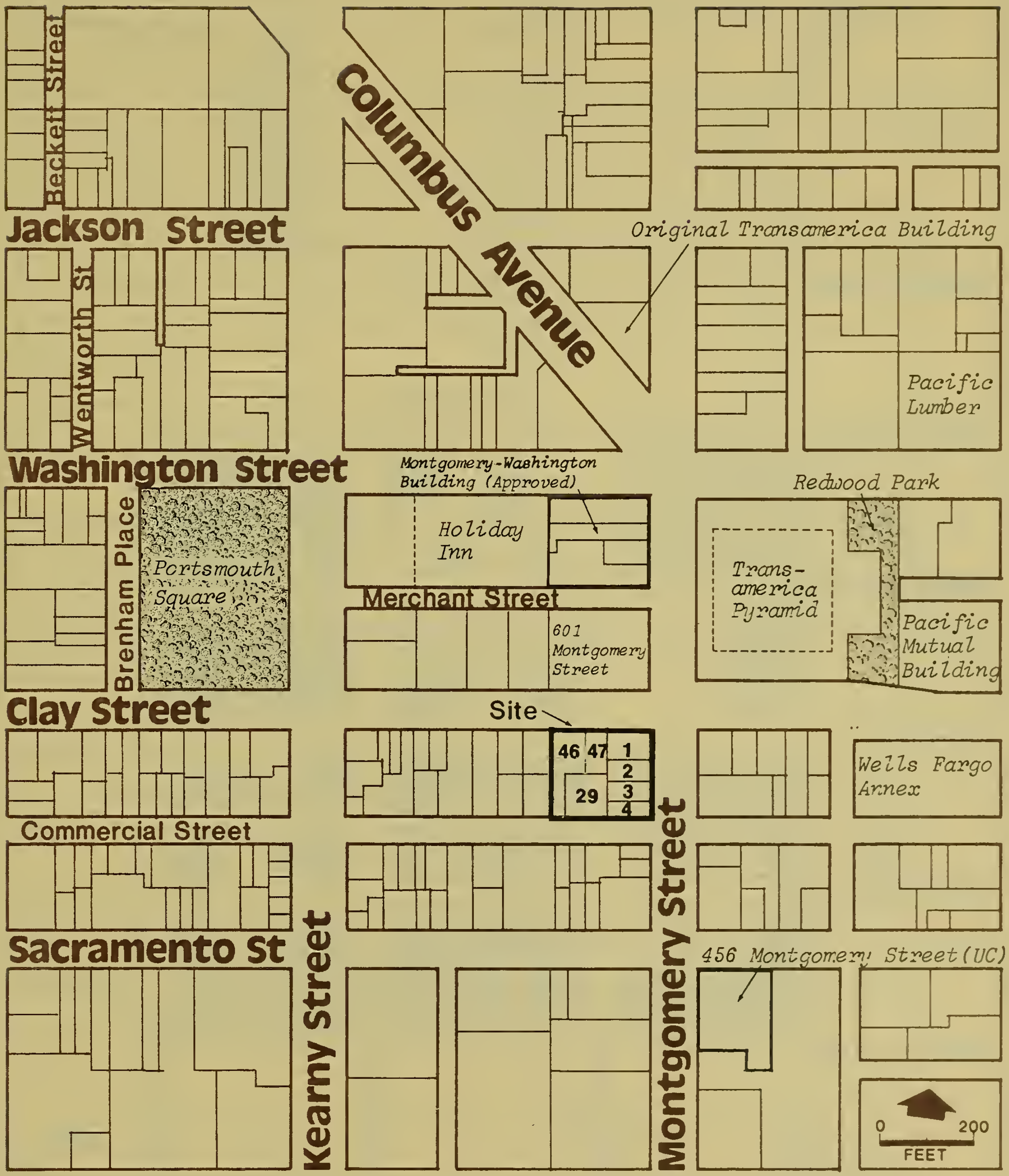
III. ENVIRONMENTAL SETTING

A. LAND USE AND ZONING

LAND USE

The project site is in the northwest corner of the Financial District, and is located among several areas with differing land use characteristics (see Figures 12 and 13, pages 33 and 34). Banking and office facilities of the San Francisco Financial District predominate along Montgomery Street south of the site. Market Street is about one half mile south of the site. The Financial District and Market Street include much of the City's recent high-rise development. The 850-foot Transamerica Pyramid and the 280-foot 601 Montgomery Street office buildings are one block northeast and north of the site, respectively. The 378-foot 456 Montgomery Street building is under construction one block south of the project site. The 300-foot Montgomery-Washington office-residential project is approved for development one block north of the site. Two blocks northeast of the project site, the Jackson Square Historic District provides a reduction in scale also characteristic of the North Beach area, which begins two blocks north of the site. Immediately west of the proposed site, the similarly reduced-scale Chinatown community includes residential, commercial and tourist-oriented land uses. The 632 Commercial Street building, adjacent to the site on the west, is occupied by offices and a KABL radio station recording studio. Open space in the area includes Portsmouth Square, one block west of the site, and Redwood Park, private open space maintained for public use as part of the Transamerica Pyramid, one block northeast of the site. The principal retail area in the City, centered at Union Square, begins about five blocks southwest of the site.

Three of the five structures on the site are currently used by the Bank of Canton. The two-story structure at 555 Montgomery Street (Lots 1 and 2) and the four-story structure (Lots 3 and 4) at 531-541 Montgomery Street house the main branch and headquarters office space



Legend

━ Project Location

1,2,3 Assessor's Lot Numbers (Block 227)

UC Under Construction

▨ Open Space

FIGURE 12: Project Site and Vicinity

SOURCE: Environmental Science Associates, Inc.

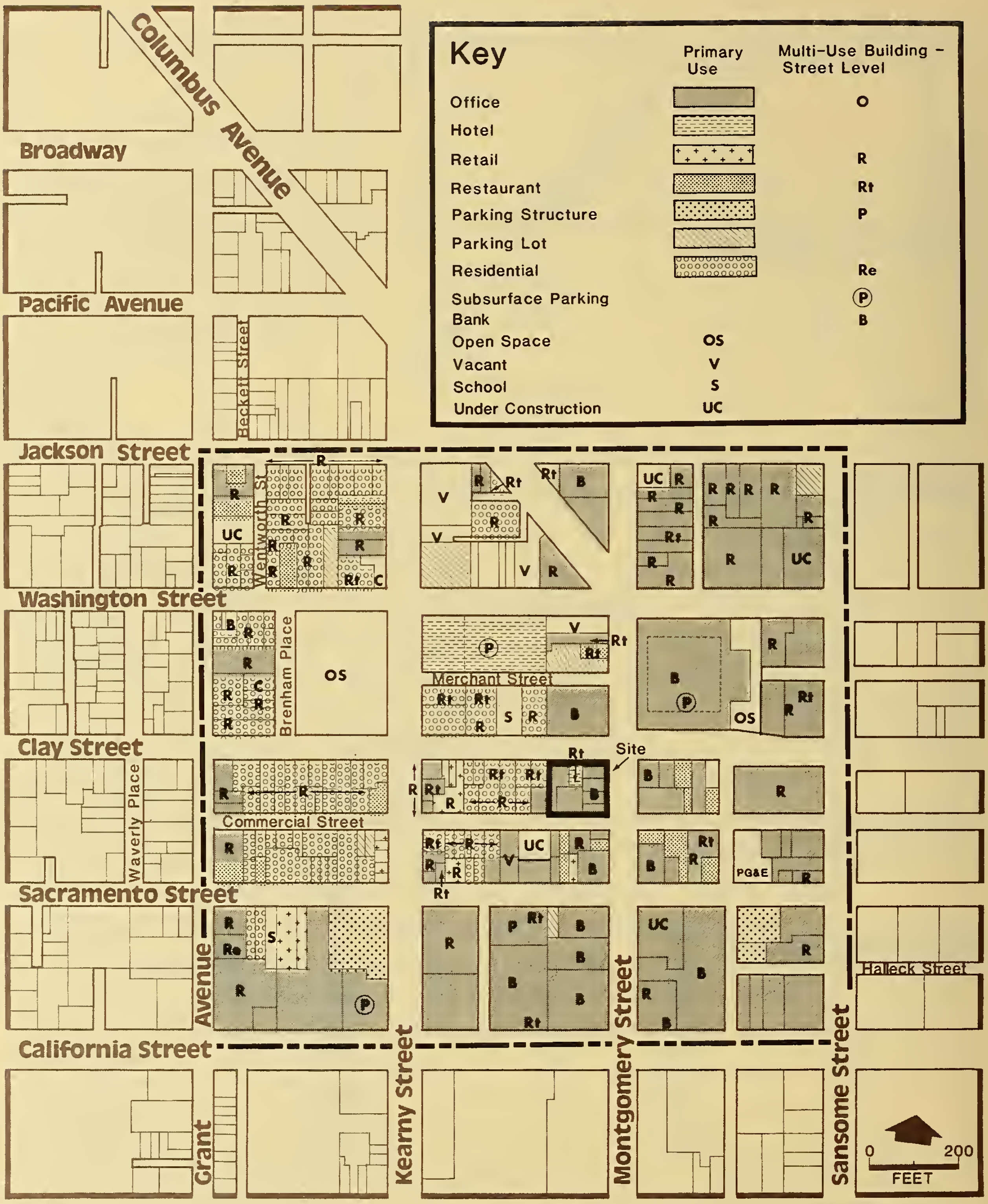


FIGURE 13: Land Use in the Vicinity of the Project Site

SOURCE: Environmental Science Associates, Inc.

of the Bank. At 608-610 Commercial Street, the surviving one-story portion of the structure which served as the U.S. Sub-Treasury Building from 1876 to 1915, is now used as office space by the Bank (Lot 29). A four-story structure at 619 Clay Street (Lot 47) contains an insurance broker's office and a restaurant on the ground level. There was formerly a residential hotel on the upper three floors; the hotel has been vacant since July 1980. The four-story structure at 631 Clay Street (Lot 46) is office space occupied by professional firms.

ZONING

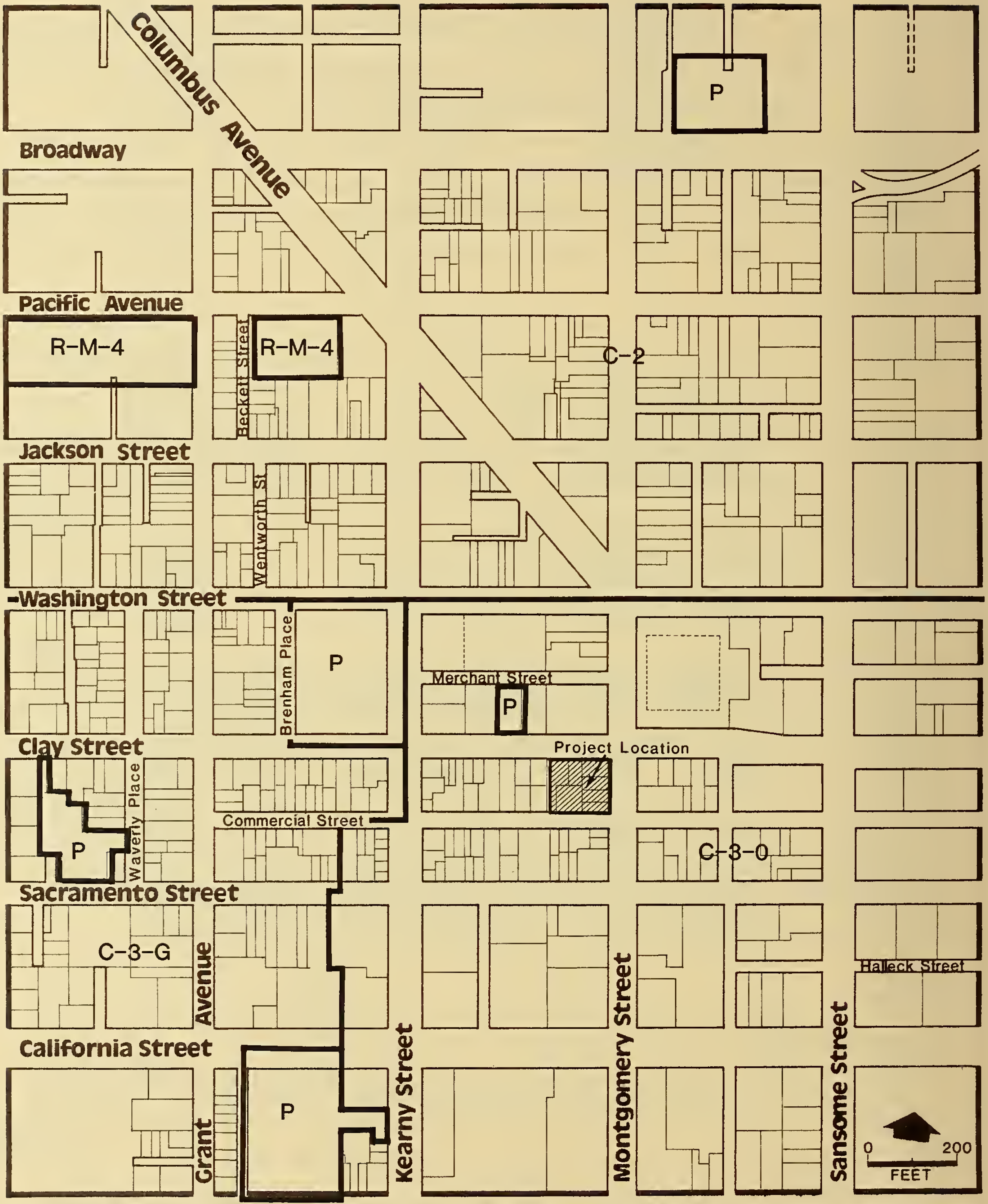
The City Planning Code zoning classification for the site and surrounding area is C-3-O, Downtown Office District (see Figure 14). Office and retail uses, with a basic Floor Area Ratio (FAR) of 14:1, are permitted in this district. This means that buildings may have a maximum total floor area that is 14 times the area of the site.

The eastern portion of the site, including Lots 1, 2, 3 and 4, is in a 400-I Height and Bulk district while the western portion of the site, Lots 29, 46 and 47, lies in a 320-I Height and Bulk district (see Figure 15, page 37). The maximum permitted height for the eastern portion of the project is thus 400 feet, while the maximum height for the western part of the building is 320 feet. Above the height of 150 feet, the maximum permitted building length for both parts of the site is 170 feet and the maximum permitted diagonal measurement is 200 feet.

Two blocks north of the site the height limit changes from a 320-I Height and Bulk district to a 65-D-2 district. In the latter height district, height exceptions may be approved by the City Planning Commission (with conditional use authorization) not to exceed 200 feet, in order to create a visual transition from high-rise structures in the Financial District to lower three- and four-story buildings in the Jackson Square Historic District to the northeast, and on Telegraph Hill and in North Beach to the north./1/

NOTE - Land Use and Zoning

/1/ City and County of San Francisco, Chapter 11 of the San Francisco Municipal Code, City Planning Code, Sec. 263.1.



Legend

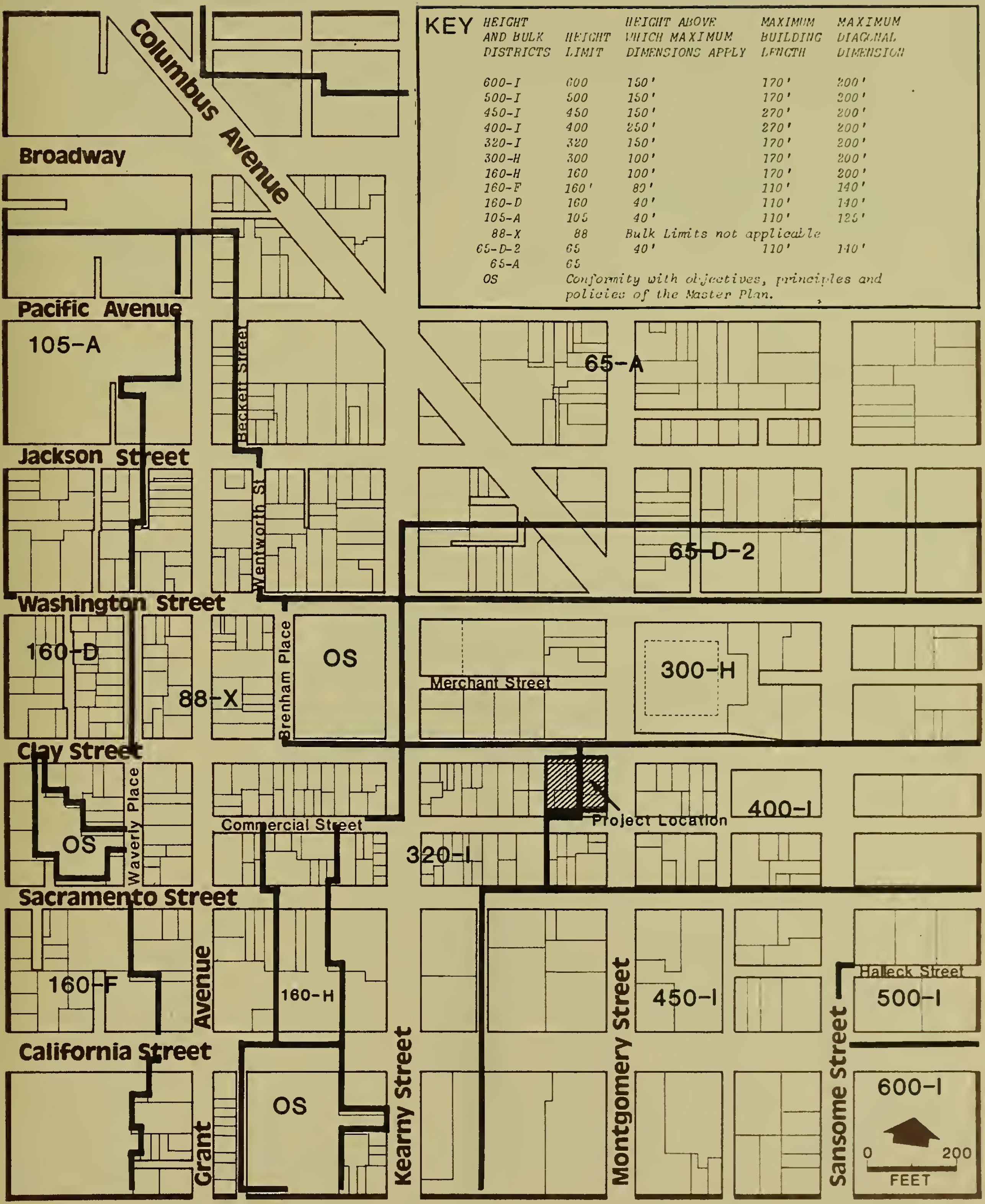
▨ Project Location

Districts

C-3-0	*Downtown Office Districts*
C-3-G	*Downtown Office Commercial District*
C-2	*Community Business District*
R-M-4	*Residential Mixed District*
P	*Public Use District*

FIGURE 14: Planning Code Use Districts

SOURCE: Department of City Planning, San Francisco



KEY

HEIGHT AND BULK DISTRICTS	HEIGHT LIMIT	HEIGHT ABOVE WHICH MAXIMUM DIMENSIONS APPLY	MAXIMUM BUILDING LENGTH	MAXIMUM DIAGONAL DIMENSION
600-I	600	150'	170'	200'
500-I	500	150'	170'	200'
450-I	450	150'	270'	200'
400-I	400	250'	270'	200'
320-I	320	150'	170'	200'
300-H	300	100'	170'	200'
160-H	160	100'	170'	200'
160-F	160'	80'	110'	140'
160-D	160	40'	110'	140'
105-A	105	40'	110'	125'
88-X	88	Bulk Limits not applicable		
65-D-2	65	40'	110'	140'
65-A	65			
OS	Conformity with objectives, principles and policies of the Master Plan.			

Legend

▨ Project Location

FIGURE 15: Planning Code Height and Bulk Districts

SOURCE: Department of City Planning, San Francisco

B. URBAN DESIGN, SHADOW, AND WIND EFFECTS

VISUAL

The project site is occupied by five one- to-four-story structures. The site slopes up moderately to the west and contains no landscaping or distinctive topographic features.

The two structures fronting Montgomery Street have been remodeled with a unified facade, as viewed from the east, two to four stories high. These buildings serve as the existing main branch and headquarters offices of the Bank of Canton with the address of 555 Montgomery Street (see Figure 16). Views from the north along Clay Street include the two- to-four-story Montgomery Street facade of the Bank of Canton, the four-story commercial and former residential hotel structure at 619-23 Clay Street and the office structure at 631 Clay Street (see Figures 17 and 18, pages 40 and 41). Views from the south along Commercial Street include the four-story portion of the Bank of Canton offices, the surviving portion of the one-story Old Sub-Treasury Building at 608-610 Commercial Street (see Figure 19, page 45), and the rear facade of the four-story structure at 631 Clay Street.

Commercial Street between Montgomery Street and Kearny Street is characterized by small-scale, one- to-four-story commercial structures and a variety of retail services. The 22-foot street width, narrower than that of Clay or Montgomery Streets, contributes to this small-scale character. Looking west along this street from the site, the view terminates uphill at Grant Avenue in Chinatown where the street ends; looking east, the view terminates with the Ferry Building (framed between the Embarcadero Center towers), the only street in San Francisco other than Market Street, where this occurs. In views from the south, the 19-story 601 Montgomery Street building rises behind the buildings on the site. From the east, the small-scale views of older structures of Chinatown against the east slope of Nob Hill form a background to the site. Streets adjacent to or near the site mark the boundary between the taller buildings of the Financial District to the east and south and smaller-scale structures of Chinatown to the west and of the Jackson Square Historic District to the north. The eight-story Bank of America building (former Bank of Italy building), opposite the site at 552 Montgomery Street,

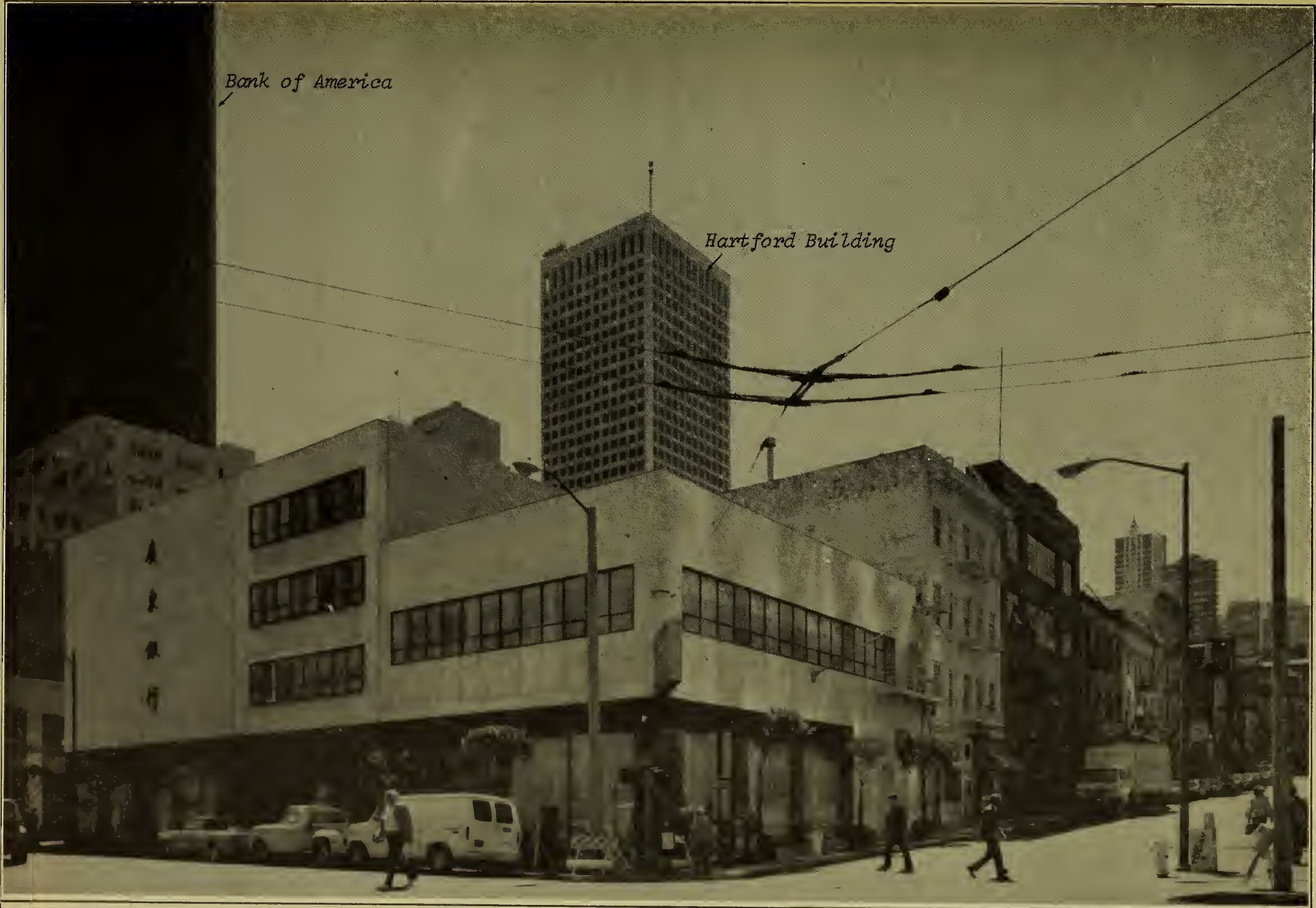


FIGURE 16: Montgomery and Clay St. Frontage of Project Site

SOURCE: Environmental Science Associates, Inc.

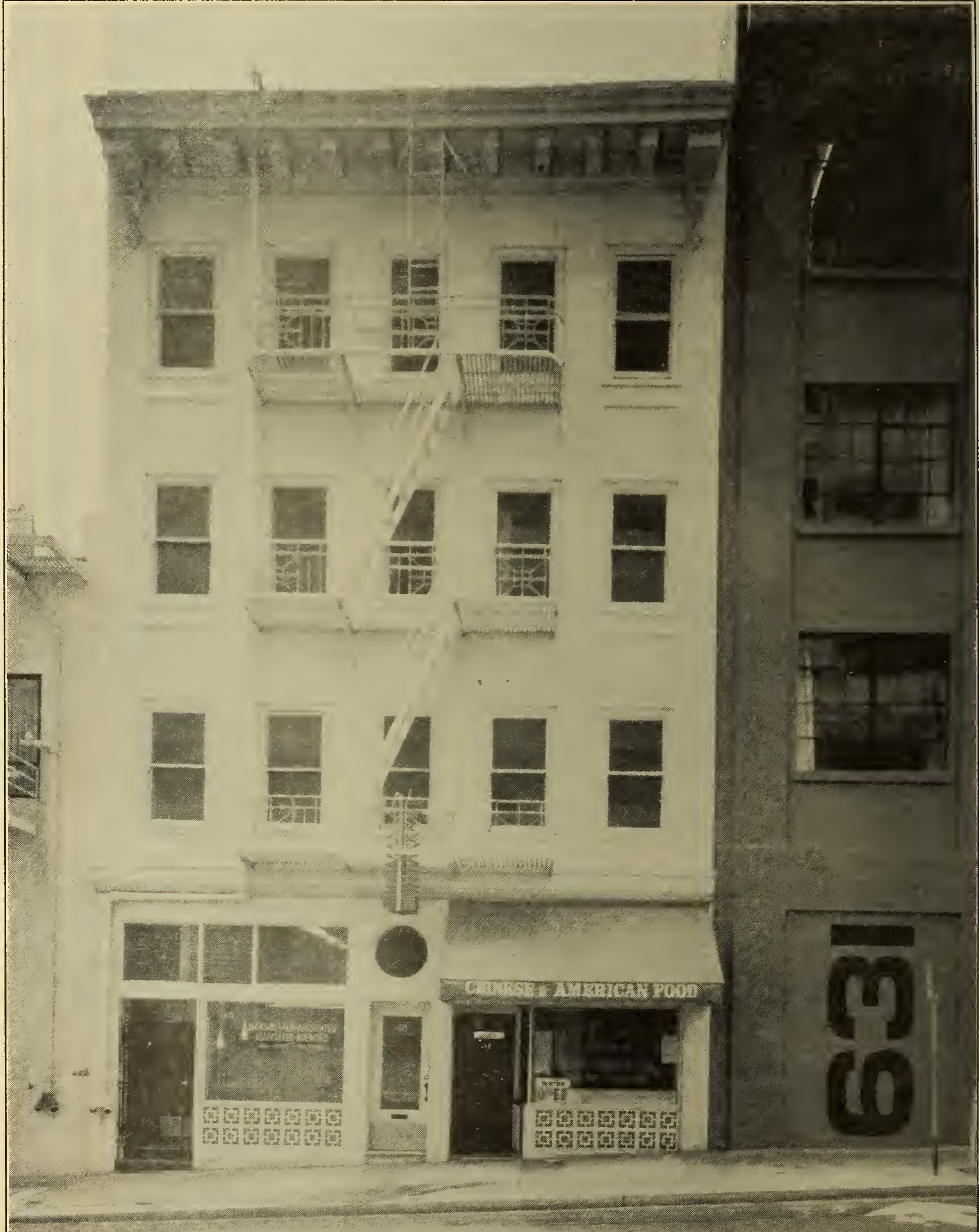


FIGURE 17: View of 619-623 Clay St.

SOURCE: Environmental Science Associates, Inc.

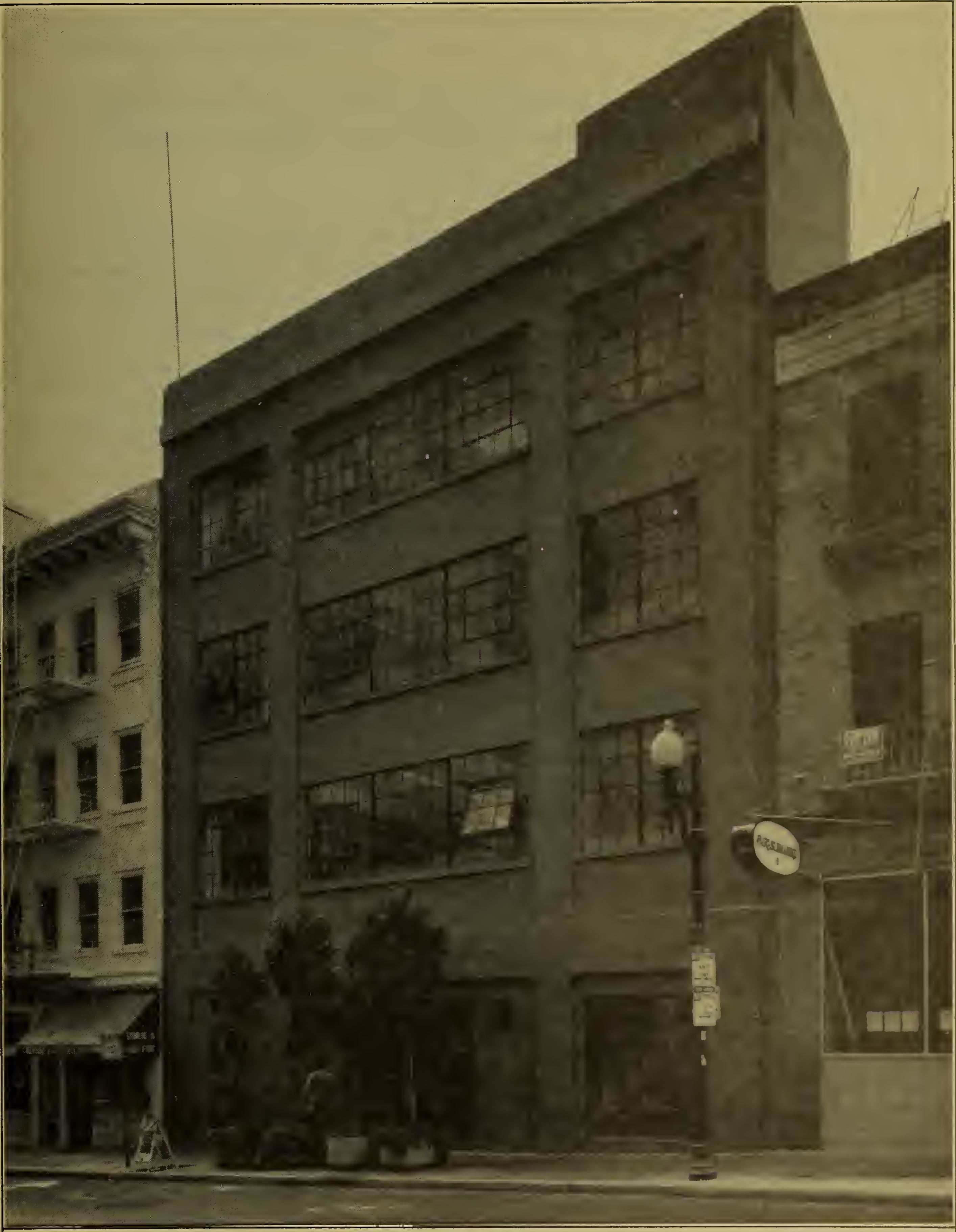


FIGURE 18: View of 631 Clay St.

SOURCE: Environmental Science Associates, Inc.

is a transitional-scale visual element. One block north of the site, at Montgomery and Washington Streets, is the 850-foot Transamerica Pyramid, a visual landmark on the San Francisco skyline.

The project site is not visible from long-range view points to the west or south, such as Twin Peaks or Potrero Hill, respectively, due to intervening high-rise structures. The existing structures on-site are generally not visible beyond the buildings and the street segments in the immediate vicinity. The site is visible, however, from locations at higher elevation in Chinatown to the west. The absence of a sizable building on the site currently permits views of the lower portions of the Transamerica Pyramid and the 601 Montgomery Street building from the south, through the site.

No long-range views of San Francisco Bay or the City are available from the existing buildings on the site.

WIND/1/

Wind conditions in San Francisco help determine pedestrian comfort on sidewalks and in other public areas. In downtown areas, flat-walled buildings can funnel wind flows into narrower areas, increase air turbulence, and divert winds downward to street level.

● Westerly, southwesterly, and northwesterly winds are the most frequent and strongest winds during all seasons in San Francisco./2/ (In meteorology, a west wind is one that blows from the west.) The most frequent wind direction during most months is westerly; on an annual aggregate basis, west winds blow approximately 52 percent of the time. West winds are also the strongest, averaging about seven mph, exceeding 12 mph six percent of the time. Southwesterly winds are typically the second most frequent (about 14 percent of the time) and second strongest winds averaging seven mph and exceeding 12 mph about two percent of the time. Northwesterly winds have had the second highest average speed during some years, though they generally occur six to eight percent of the time, averaging five mph.

Average wind speeds are highest during summer and lowest during winter. However, the strongest peak winds occur during the winter, when average speeds for one hour of 27 miles per hour or more have been recorded. The highest average wind speeds are in the mid-afternoon, and the lowest are in the early morning. Peak winds are distributed evenly throughout the day.

NOTES - Urban Design, Shadow, and Wind Effects

/1/ This section is based on a study, "Wind-Tunnel Studies of the Bank of Canton Building", December 1981, prepared by Dr. Bruce White as a subconsultant to Environmental Science Associates, Inc. A copy of that study is included in Appendix A, page 251.

/2/ The reported U.S. Weather Bureau data was collected from 1891 to 1930 at 460 California Street, near Montgomery Street, about two blocks south of the site. The Bay Area Air Quality Management District data was collected in the mid-1970's at 939 Ellis Street, near Van Ness Avenue, about 1.8 miles southwest of the site. (The BAAQMD station is now at 900 23rd Street.)

C. CULTURAL AND HISTORIC FACTORS

No known buried ships or other archaeological resources exist on the site, which is currently occupied by five structures. The site is about 200 feet inland of the 1849 Bay shoreline./1/

The first U.S. Branch Mint in San Francisco was located on the site at the current location of the Old Sub-Treasury Building, at 608-610 Commercial Street./2/ The mint, built in 1849, housed private assaying, smelting and minting facilities until 1851. Between 1851 and 1853 the building was leased by the federal government for the U.S. Assay Office. The government purchased the building in late 1853 and converted it into the first U.S. Branch Mint in San Francisco. In 1874, the building was converted into the U.S. Sub-Treasury but the quarters proved unworkable and the building was demolished in that year./3/

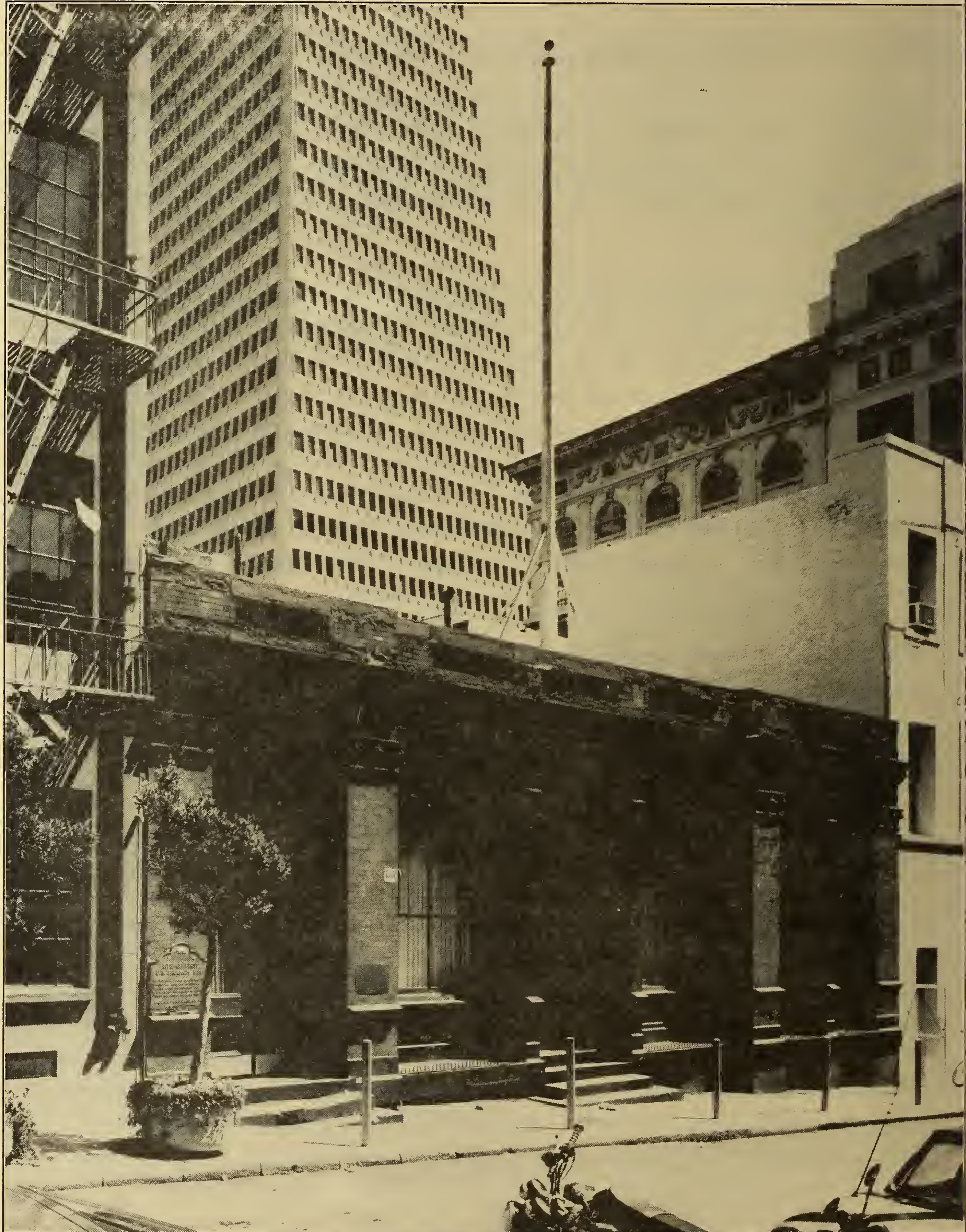
Between 1875 and 1877, a four-story building was constructed on the site. Originally, the building housed the Sub-Treasury plus additional government offices but the expanding Sub-Treasury soon filled all floors of the building. The remaining portions of this structure occupy the Commercial Street part of the site. Other than the possibility of reused bricks in the existing structure, there do not appear to be any remaining portions of the 1849 structure.

The building was designed as a secure, fire-resistant stronghold, constructed of brick, load-bearing walls. Cast iron pilasters and panels, combined with brick pilasters, adorn the street facade (see Figure 19). (A pilaster is a non-supporting, decorative pillar that may be freestanding like a column, or a wall projection).

The building was damaged by fire in the 1906 San Francisco earthquake and fire, and the top three stories were removed. (The basement coin vault remained intact.) In the post-earthquake reconstruction, the second-story sills were incorporated into the building and capped with a new stone and brick parapet and cornice. The gutted interior was refinished, new windows and doors installed, and one of the two decorative cast-iron columns were removed. In 1915, the U.S. Sub-Treasury relocated and the building was sold. From 1915 to 1931, the building served as a metal refining and melting plant. From 1931 to 1964, it housed a printing company. In 1970, the Bank of Canton of California purchased the building for office space.

The Old Sub-Treasury Building is now a one-story brick structure with full basement. The floor plan is square, 60 feet per side. There appear to be no major exterior modifications to the building since 1906. Interior modifications include a dropped acoustic-tile ceiling and a new wall, both added since 1974. A smooth metal column was added in 1941 to provide structural support when the main floor vault was removed. This column is in a different location than the decorative column removed in 1906./3/

The Old Sub-Treasury Building was designated City Landmark No. 34 in 1970. (The landmark designation case report is included in Appendix B, page 275.) The Sub-Treasury Building is rated "3" in the 1976 Department of City Planning (DCP) survey of architecturally significant structures in San Francisco (on a scale of one to five, with five most significant). The building is outside the study area of the survey conducted for the Foundation for San Francisco's Architectural Heritage, published in Splendid Survivors./4/ The Montgomery Street frontage of the project site is in the survey area, but these buildings are not rated in the Heritage survey or in the DCP survey. (A summary of City and Heritage survey methodology is included in Appendix B, page 273.)



SOURCE: Environmental Science Associates, Inc.

FIGURE 19: View of Old Sub-Treasury Building, 608-610 Commercial St. (S.F. Landmark No. 34)

A survey of Chinatown architecture completed in 1981 lists the Old Sub-Treasury as a building of merit./5/

- 600-604 Commercial Street (at the corner of Commercial and Montgomery Street, now remodeled as part of the 555 Montgomery Street Building) is the former Davidson Building. Research by the Landmarks Preservation Advisory Board indicates that the first floor of the building dates from 1851. It housed the general business offices of William D.M. Howard and an individual named Mellus, and the offices of Benjamin Davidson, who established an agency for the Bank of Rothschilds of London. Also, the newspaper printing office of James King of William, editor and publisher of the San Francisco Evening Bulletin, was located in the building. The building was remodelled in the 1960's for use by the Bank of Canton./5A/ The original interior features, including a groin vaulted ceiling in the main banking hall and vaults in the basement, may still exist behind the later alterations. The Davidson Building was reviewed but not recommended for landmark designation by the Landmarks Preservation Advisory Board in 1970.

- The rest of the 555 Montgomery Street address includes remodeled portions of three structures. Lot 1, at Montgomery and Clay Streets, includes a concrete structure built in 1920. Lots 2 and 3 include concrete structures built in 1907 and 1908, respectively (see Figure 12, Project Site and Vicinity, page 33, for lot numbers). The original appearance of this block front has been substantially altered by Bank of Canton remodelling (see Figure 16, page 39).

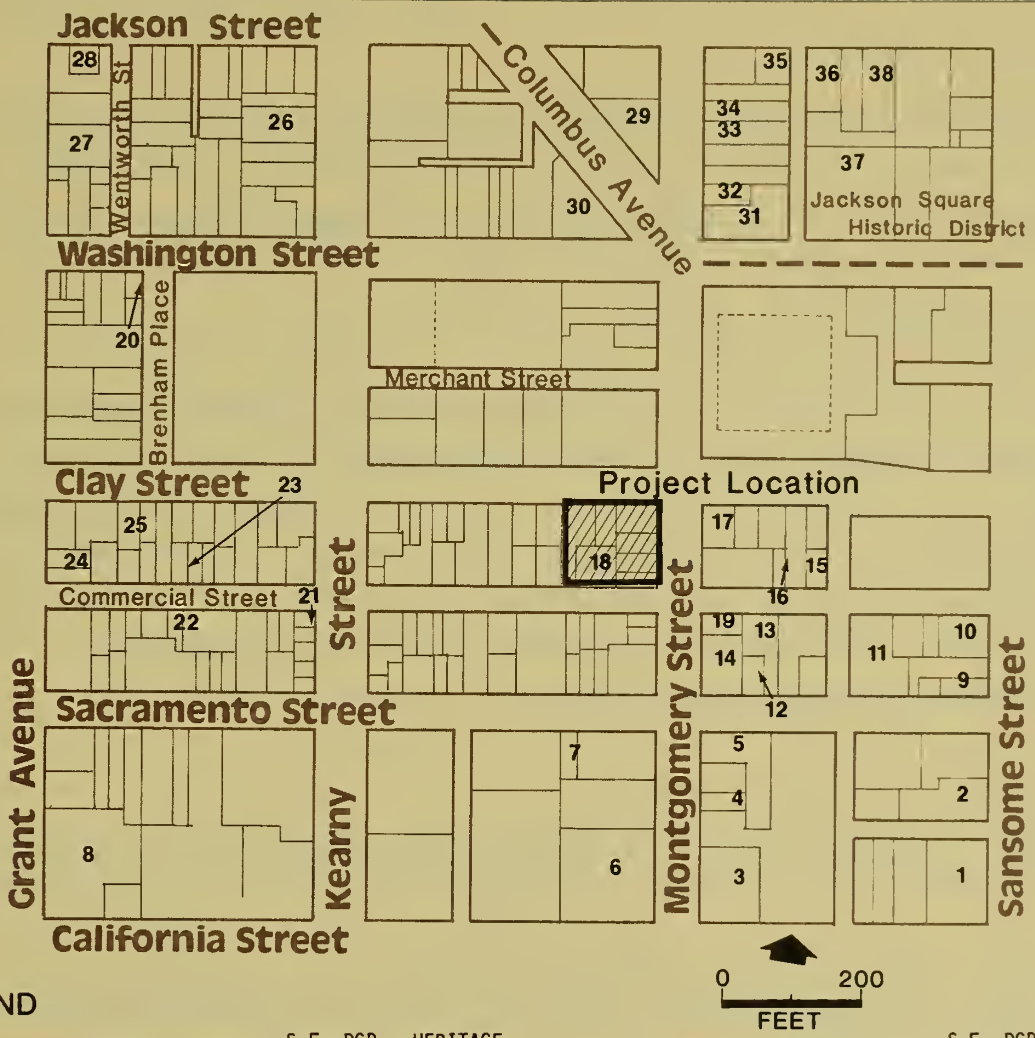
- 619-623 Clay Street is a concrete structure built in 1912. The facade is a three-part vertical composition, with a decorative belt course above the ground floor, four stories of rows of five windows with projecting sills and pediments, and a overhanging cornice with decorative brackets at each end of the facade (see Figure 17, page 40).

- 631 Clay Street is a concrete structure built in 1926. The four-story structure has multiple-paned industrial-type windows, with simplified projecting sills and cornice. The ground floor appear to have been substantially remodelled (see Figure 18, page 41)./5B/

The project site is near several architecturally significant Financial District buildings (see Figure 20). The Kohl Building at 400 Montgomery Street, the Financial Center Building at 405 Montgomery Street, the Anton Borel and Company Bank at 440 Montgomery Street, the Sutro and Co. Building and the Bank of Italy (predecessor of the Bank of America) Building at 552 Montgomery Street are rated "A" for "highest architectural importance" in the Heritage survey. (The exteriors of the 440 and 460 Montgomery Street structures are being incorporated in the base of a high-rise office structure now under construction, the 456 Montgomery Street building.) The Kohl Building, the Anton Borel and Company Bank and the Bank of Italy Building are rated "4" in the DCP survey. The 405 Montgomery Street building was not rated in this survey. The American-Asian Bank at 500 Montgomery Street and the building at 520 Montgomery Street are rated "B" for "major architectural importance" in the Heritage survey. The American-Asian Bank is rated 4/5 in the City's official list; the 520 Montgomery Street building was not rated in the DCP survey. Although rated in neither survey, the Transamerica Pyramid, north of the project, at 600 Montgomery Street, serves as a visual landmark for the City.

Buildings rated A or B in the Heritage survey or 3 or higher in the DCP survey have been placed on a List of Architecturally and/or Historically Significant Buildings adopted by the City Planning Commission./6/ A November 1981 resolution states the City Planning Commission's concern for preservation of architecturally significant buildings. The resolution also acknowledges the Director of Planning's intent to recommend denial of any project that would propose to demolish architecturally significant buildings./7/

The approximately six-block-square Jackson Square Historic District, about two blocks northeast of the project site, was designated as San Francisco's first historic district, in 1972. It is separated from the site by high-rise structures including 601 Montgomery Street, the Transamerica Pyramid, and the



LEGEND

	BUILDING[1]	S.F. DCP INVENTORY	HERITAGE SURVEY
1	400 California St.+	5	A
2	343 Sansome St.	NR	B
3	400 Montgomery St.*	4	A
4	440 Montgomery St.+	4	A
5	460 Montgomery St.+	3	A
6	405 Montgomery St.	NR	A
7	615 Sacramento St.	1	B
8	680 California St.	4	NR
9	401-405 Sansome St.	3	C
10	415-429 Sansome St.	NR	B
11	222 Leidesdorff St.	NR	B
12	568 Sacramento St.	NR	B
13	569 Commercial St.	3	A
14	500 Montgomery St.	4/5	B
15	554 Commercial St.	NR	A
16	564-566 Commercial St.	1	B
17	552 Montgomery St.	4	A
18	608 Commercial St.*+	3	NR
19	520 Montgomery St.	NR	B
20	743 Washington St.	3	NR

	BUILDING	S.F. DCP INVENTORY	HERITAGE SURVEY
21	625 Kearny St.	3	NR
22	755 Commercial St.	3	NR
23	748 Commercial St.	3	NR
24	738 Grant Ave.	3	NR
25	759 Clay St.	3	NR
26	833 Kearny St.	3	NR
27	930 Grant Ave.	3	NR
28	675 Jackson St.	3	NR
29	701 Montgomery St.	4	NR
30	1 Columbus Ave.	3	NR
31	700 Montgomery St.	3	NR
32	710 Montgomery St.	3	NR
33	722 Montgomery St.+	4	NR
34	728 Montgomery St.+	3	NR
35	473 Jackson St.+	5	NR
36	451 Jackson St.+	5	NR
37	580 - 584 Washington St.	5	NR
38	431-441 Jackson St.+	4	NR

NOTES:

[1] Includes only those buildings on the San Francisco City Planning Commission's list of architecturally and/or historically significant buildings in the Downtown, May 29, 1980. See Appendix B for a discussion of surveys and ratings.

+City landmark
*State landmark

NR: Not rated.

● FIGURE 20: Architectural and Historic Resources in Site Vicinity

SOURCE: Environmental Science Associates, Inc.

approved Montgomery-Washington Building. The District was once the northern edge of San Francisco's business district. Land use in this area changed when the downtown shifted south in the late 1860's. The Jackson Square Historic District is one of the most concentrated groups of 19th century commercial structures remaining in San Francisco.

Directly north of the site is a California registered historical landmark site. The 601 Montgomery Street Building (constructed in 1979) is located on the original site of the Western Regional Headquarters of the Russell, Majors and Waddell Company. This firm, which had its main office in Leavenworth, Kansas, founded the Pony Express, and conducted operations in San Francisco from 1860 to 1861. There are six plaques on the 601 Montgomery Street property commemorating that site's history.

NOTES - Cultural and Historic Factors

/1/ Northwest Information Center, California Archaeological Site inventory, Department of Anthropology, Sonoma State University, letter, January 22, 1982.

/2/ The Original Mint site was designated California State Landmark No. 87 in 1949. The Sub-Treasury Building was designated San Francisco City Landmark No. 34 in 1970. It is considered eligible for inclusion in the National Register of Historic Places.

/3/ Discussion of the Old Sub-Treasury Building is based on Architectural and Historical Assessment - Old Sub-Treasury Building, 608 Commercial Street, San Francisco, California, by Charles Hall Page & Associates, June 26, 1981 and September 18, 1981. The report is on file (EE80.296) at the Office of Environmental Review, 450 McAllister Street.

/4/ Charles Hall Page and Associates, 1979, Splendid Survivors, prepared for the Foundation for San Francisco's Architectural Heritage.

/5/ "Chinatown Group Completes Neighborhood Survey," Heritage Newsletter, Volume IX, No. 1, Winter 1981.

● /5A/ Jonathan Malone, Secretary, San Francisco Landmarks Preservation Advisory Board, letter, April 29, 1982.

● /5B/ Building construction dates and material data are from records in the San Francisco Assessor's Office.

/6/ San Francisco City Planning Commission Resolution No. 8600, May 29, 1980.

/7/ San Francisco City Planning Commission Resolution No. 9240, November 19, 1981.

D. EMPLOYMENT, HOUSING, AND FISCAL FACTORS

LOCAL AND REGIONAL COMMERCIAL SPACE AND EMPLOYMENT

● San Francisco is the major office center in the Bay Area, with approximately 60 million gross square feet of office space in 1981. During the 1970s, Downtown high-rise space (in buildings of 10 or more stories) was added at a rate of about 1.6 million square feet per year. Approximately 27 million square feet were constructed between 1960 and 1980 (see Appendix C, Table C-1, page 278). An additional 8.7 million square feet of office space would come into use when the buildings under construction, and those approved but not yet under construction (as of November 1981), are completed./1/ Another approximately 11 million square feet of office space is under consideration in the Department of City Planning as of April 1982. If all were built as proposed, a total of about 20 million square feet of office space would be added to the downtown area. Another two to three million square feet are under early review or have shown no activity for eight months or more and have not been included in cumulative analysis.

The largest employment growth in the Bay Area from 1970 to 1978 occurred in the office sector, with over 60 percent of the regional increase in total work force. A total of 1.2 million people in 1978 held office jobs in the Bay Area, with nearly 70 percent employed by firms serving the local population. Over 55 percent of the 280,000 office workers employed in San Francisco worked for employers such as national or regional headquarters which serve a wider geographical area./2/

In early 1981, annual rents in the newer downtown office buildings ranged from about $24 to $35 per square foot per year. Office space in the buildings that will go on the market in 1983 is expected to command annual rents of between $30 and $50 per square foot (1981 dollars)./3/ San Francisco downtown office vacancy remains one of the lowest in the nation at 0.1%./4/ Low vacancy rates, coupled with rapidly increasing rents, suggest that the supply of new office space in San Francisco has not kept pace with demand.

The apparent shortage of office space in San Francisco is one factor that has influenced some potential users of San Francisco office space to locate elsewhere. While the City houses 60 percent of the region's office space, 56 percent of new construction, based on building permit value, took place outside the City from 1972 to 1979./3/ Less-expensive space in outlying areas attracts companies that do not need a downtown San Francisco location or can shift certain functions (such as clerical support) out of the City. For example, approximately nine million square feet of new office space is under construction or planned in the next ten years in major projects in San Mateo County. Office space construction in Contra Costa County averages one million square feet a year as of 1981. Rents for new office space in both of these counties average from $15 to $18 per square foot per year./4/

Employment and Tenant Mix at the Project Site

Businesses on the site employ about 170 persons, including 65 Bank of Canton employees. Table 5, Section IV., Environmental Impact, page 84 shows existing uses and employment on the site, for comparison with project uses and employment.

HOUSING

Housing on the Project Site

A 22-unit residential hotel is located on the project site at 619-25 Clay Street. The hotel has been vacant since July 1980. The Bank of Canton took possession of the structure in December 1980./5/

Regional and San Francisco Housing Characteristics

A description of regional and San Francisco housing characteristics is included in EE.80.355, 101 Montgomery Street, Final EIR, certified May 7, 1981, pp. 37-49. This report is available for public review at the Office of Environmental Review, 45 Hyde St., Room 319, and is hereby incorporated by reference into this EIR as provided for in the California Environmental Quality Act (CEQA) guidelines, Title 14, Chapter 3, Section 15140. Information on the housing stock includes amount, growth factors, vacancy rates, and purchase and rental costs. Both regional and San Francisco housing stock are characterized by low growth, low vacancy rates, and high purchase and rental costs in relation to typical wages paid. These factors, together with high interest rates and high San Francisco land costs, have tended to constrict the supply and affordability of housing in San Francisco.

FISCAL FACTORS

The 1980-81 assessed value of the seven parcels making up the project site is $915,000. At the 1980-81 property tax rate of $4.92 per $100 of assessed valuation, the property yielded about $45,000 in property tax revenues, distributed as shown in Table 1. The total General Fund revenues derived annually from the site by the City and County of San Francisco from the sales tax, payroll tax, utility users' tax, and non-bond property tax were about $71,300 in 1981.

TABLE 1: DISTRIBUTION OF PROPERTY TAX REVENUES FROM PROJECT SITE IN 1980-81*

Agency	1980-81 Tax Rate (Dollars per $100 of Assessed Value)	Percent of Total	Revenues
City and County of S.F.	$4.162	84.60	$37,800
S.F. Unified School District and S.F. Community College District	0.401	8.15	3,700
Bay Area Air Quality Management District	0.008	0.17	80
Bay Area Rapid Transit District	0.348	7.08	3,200
TOTAL	$ 4.92	100.00	$44,780

* Based on assessed valuation of $915,000.

SOURCE: San Francisco Tax Collector's Office; Environmental Science, Associates

Costs to City

The City incurs costs in servicing the existing buildings. Police, fire, and general government expenditures are supported primarily by the General Fund. Most street maintenance, street improvement, and traffic control costs are supported by other revenue sources such as fees, fines, and federal and state aid. Cutbacks in federal and state aid may require the City to allocate General Fund revenues to maintain historic service levels.

NOTES - Employment, Housing, and Fiscal Factors

/1/ San Francisco Department of City Planning, November 1, 1981, Statistical Update, Citywide Office Development.

/2/ Association of Bay Area Governments (ABAG) and Bay Area Council, December 1979, San Francisco Bay Area Economic Profile.

/3/ Association of Bay Area Governments (ABAG) April 1981, Bay Area Office Growth, Working papers on the Region's Economy, Number One.

/4/ Coldwell Banker, Office Vacancy Index of the United States, June 30, 1981.

/5/ The Bank of Canton of California was first approached regarding acquisition of the 619-623 Clay Street property in November 1979. Following negotiations, a purchase agreement was drafted by Bruce Gilmore of Brobeck, Phleger and Harrison, representing the Bank, and counsel for the sellers, Mr. and Mrs. Jackson Hu. That agreement was signed in March 1980. The agreement contained terms and conditions customary in such transactions, including the right of the Bank to withdraw unless the building were vacant with the exception of specific tenants. According to the sellers, the premises were vacated (except for the tenants permitted under the purchase agreement) in July 1980. Since that time there have been no residential tenants. The Bank took possession of, and title to, the 619-623 Clay Street property in December 1980.

E. DOWNTOWN FIRE PROTECTION SERVICE/1/

In recent years, the San Francisco Fire Department has experienced reduction in personnel due to budgetary cutbacks. Daily staffing has decreased by nearly 100 persons from 1975 to 1981, from about 410 to about 315. There were fewer companies and on the average, fewer firefighters per company, in 1981.

Although it would appear that this reduction in staffing would result in more fires and an increase in multiple-alarm fires, Fire Department statistical records indicate otherwise.

While there was a greater number of emergency calls in 1980 than there were ten years ago (39,199 in 1980 as compared to 30,727 in 1970) there were 26 percent fewer building fires in the same period. In addition, greater (more than one alarm) alarms have been reduced by 35 percent in the same time period (see Tables 2 and 3).

TABLE 2: SAN FRANCISCO FIRE INCIDENCE, 1970-1981

	Building Fires	Multiple-Alarms	Total Alarms
1980-81	2816	90	39,199
1975-76	3793	146	34,416
1970-71	3830	139	30,727

SOURCE: San Francisco Fire Department records, confirmed by Emmet D. Condon, Deputy Chief, September 24, 1981.

TABLE 3: SAN FRANCISCO FIRE INCIDENCE, 1960-1981

YEAR (FISCAL	1980-81	1979-80	1975-76	1970-71	1965-66	1960-61
TOTAL ALARMS	39,199	39,496	34,416	30,727	21,448	14,870
TOTAL BUILDING FIRES	2,816	2,898	3,793	3,830	3,476	3,364
MULTIPLE ALARM BUILDING FIRES:						
SECOND ALARMS	59	65	107	90	107	64
THIRD ALARMS	19	19	29	39	32	27
FOURTH ALARMS	7	7	6	9	7	6
FIFTH ALARMS	5	2	4	1	3	1
TOTAL MULTIPLE ALARMS	90	93	146	139	149	98
FIRE DEATHS	28	12	47	37	28	47

SOURCE: San Francisco Fire Department Annual Reports, for the listed years.

Fire Department statistics by Fire District within the City are available only for 1977 to 1980, an insufficient period of time within which to reliably discern trends. There is no indication in this data of any difference in trend in the downtown area compared to the rest of the City.

New high-rise structures in San Francisco have been required to conform with the Life Safety provisions of the San Francisco Building Code since 1975. These buildings must be provided with automatic fire sprinklers throughout, as well as with a fire alarm system, emergency power, and special elevator controls. Although the probability of a fire occurring in a new high-rise building is about the same as that for any pre-1975 building of similar size and occupancy, the chance of the fire spreading is reduced by the automatic operation of the fire sprinkler(s). In the majority of fires involving fully sprinklered buildings, a single sprinkler is adequate to control the fire because the sprinkler extinguishes flames before they spread.

The Fire Department attributes the decrease in building fires and multiple-alarm fires to increased fire prevention inspections by fire suppression units, improved abatement procedures for code violations by the Fire and Building Departments, greater focus on public safety educational programs, and the continuing replacement of older, more hazardous structures with modern construction that conforms to the life safety provisions of the building code.

Approximately 450 high-rise buildings in San Francisco have been affected by retroactive state high-rise regulations which have resulted in upgrading of their fire safety for occupants as well as for firefighters who must enter the buildings under emergency conditions.

NOTE - Downtown Fire Protection Service

/1/ Information contained in this section is from Bendix Environmental Research, Inc., Environmental Consultants and Fire Protection Engineers, confirmed by Emmet D. Condon, Deputy Chief, San Francisco Fire Department, September 24, 1981.

F. TRANSPORTATION, CIRCULATION AND PARKING

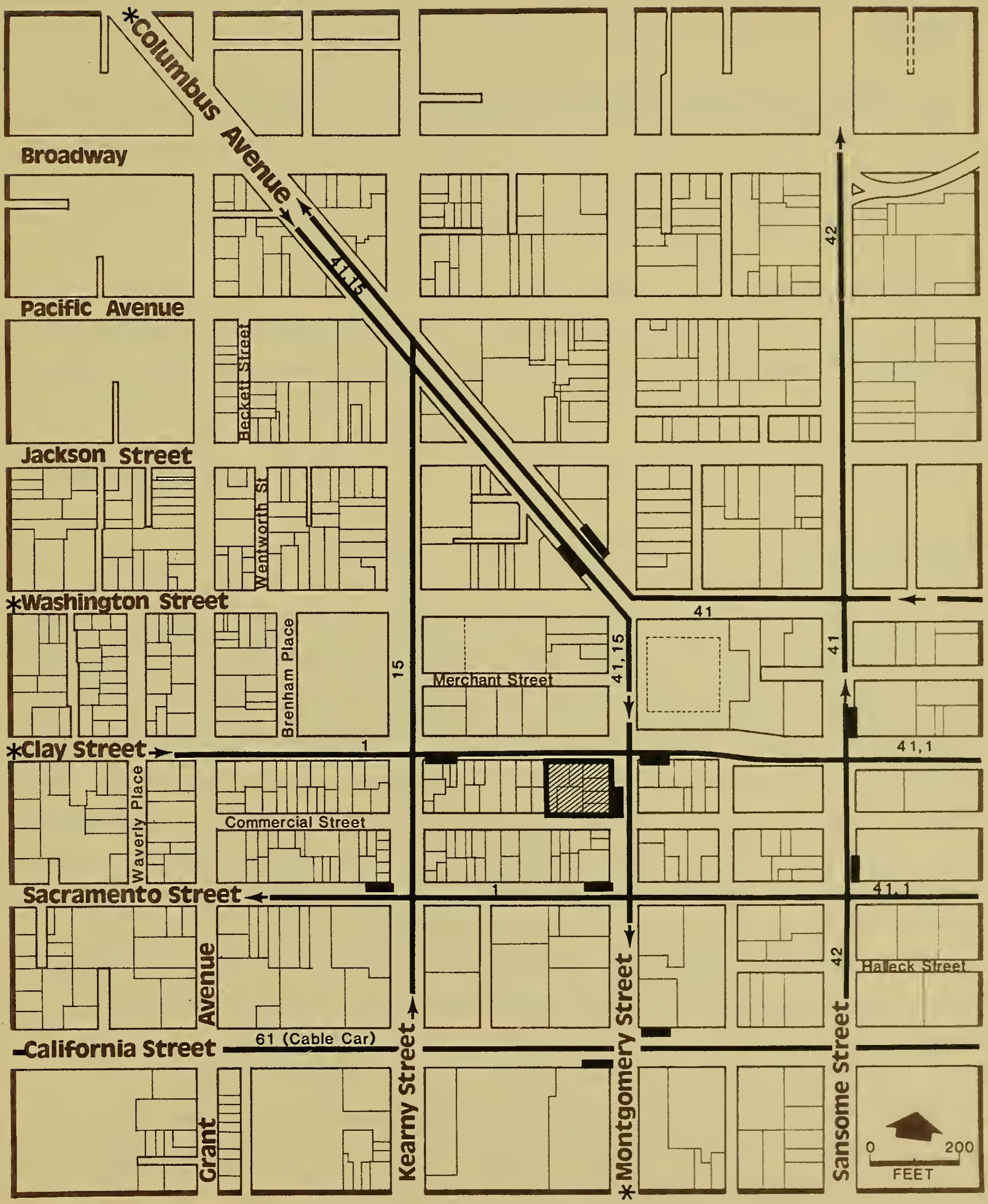
STREET AND FREEWAY SYSTEM

The site is served by local streets and by portions of the regional freeway system (see Figure 1, page 16, and Figure 21, page 56). Access to the freeways connecting with the East Bay, San Francisco International Airport and the Peninsula is provided by pairs of ramps about 1,500 feet to the east (Washington and Clay Streets, at Davis Street), and about 1,400 feet to the northeast (Broadway at Sansome and Battery Streets).

The site is within the Downtown Core automobile control area designated in the Downtown Transportation Plan of the Transportation Element of the San Francisco Comprehensive Plan./1/ This area is described in the Plan as "that intensely populated area which functions as a financial, administrative, shopping and entertainment center where priority must be given to the efficient and pleasant movement of business clients, shoppers and visitors; where a continuing effort should be made to improve pedestrian, transit and service vehicle access and circulation; where priority for the use of limited street and parking space within this core should be available for these functions; and where a continuing effort should be made to reduce the impact of the private commuter vehicle."

In the vicinity of the project site, Columbus, Montgomery, Kearny, Sansome, and Clay Streets are designated transit arterial streets in the Downtown Transportation Plan./1/ Washington Street, Clay Street, Columbus Avenue, and Montgomery Street are designated major thoroughfares on the Thoroughfares Plan./2/ Columbus, Kearny, and Montgomery Streets are designated transit arterial streets in the Mass Transit Plan.

The intersections of Washington Street, Columbus Avenue, and Montgomery Street; Clay and Kearny Streets; and Clay and Montgomery Streets are controlled by traffic signals. The signals operate on a pre-timed basis with green time allocations in proportion to peak and off-peak traffic volumes.



Legend

▨	Project Location
→	Street Direction
41	Muni Routes
*	Major Thoroughfare
▬	Transit Stops in Site Vicinity

FIGURE 21: Muni Routes and Traffic Circulation in the Vicinity of the Project Site

SOURCE: San Francisco Municipal Railway

PARKING

A 1981 survey of existing long-term (greater than six hours), commercially available off-street parking within 2,000 feet of the project site showed a total of 13,340 spaces. An average of 560 were vacant on a daily basis at the time of the survey, for an average occupancy of approximately 96 percent./3/

On-street parking on the block faces fronting the project site includes metered spaces and loading zones on Clay Street; a commercial loading zone on Montgomery Street; metered spaces, metered loading zones, and loading zones on the south side of Commercial Street. No parking is permitted on the north side of Commercial Street. Daytime observations indicate a high usage of the metered spaces and loading zones with a moderate turnover of vehicles./4/

TRANSIT SERVICE

The site is served by San Francisco Municipal Railway (Muni) electric trolley and motor coach lines, providing radial service to and from the downtown area (see Figure 21). Muni Metro light rail vehicle lines are accessible via the Embarcadero Station (2,200 feet southeast of the project site) and the Montgomery Station (2,400 feet south of the project site) of the Market Street Subway. Regional service to the East Bay is provided by the Bay Area Rapid Transit District (BART) from the Embarcadero and Montgomery Stations, and by A-C Transit motor coaches from the Transbay Transit Terminal located on Mission Street (3,500 feet southeast of the project site). Locations of subway stations and Muni lines in the project vicinity are shown in Figure 1, page 16 and Figure 21, page 56, respectively. Service to the Peninsula is provided by the Southern Pacific Transportation Company (SP) from a train terminal at Fourth and Townsend Streets; by the San Mateo County Transit District (SamTrans), which has bus routes and stops along various downtown streets, primarily on Mission Street west of First Street; and by BART, with transfers to SamTrans routes at the Daly City Station.

The Golden Gate Bridge, Highway and Transportation District (Golden Gate Transit) provides peak-period bus service to Marin and Sonoma counties from stops on Battery (inbound) and Sansome (outbound) Streets, east of the site, rom the Transbay Transit Terminal and from stops along Howard and Folsom Streets. Golden Gate Transit also provides ferry service to terminals in Larkspur and Sausalito from the Ferry Building, about eight blocks southeast of the site.

Although not traditionally considered transit, car pooling is becoming a substantial form of paratransit. Golden Gate Transit operates a van pooling program to North Bay areas not served by existing motor coach routes. The RIDES car pooling program, operated under the auspices of a nonprofit, publicly funded corporation, provides consulting and matching services to help establish Bay Area van pools.

PEDESTRIAN ACTIVITY

Peak pedestrian flows in the project vicinity occur during morning and evening commute periods, and during the noon hour. Montgomery Street sidewalk pedestrian flows are impeded during the noon and p.m. peak hours. Clay Street flows are impeded during the noon peak. (See Appendix D, Table D-4, page 282, for pedestrian flow descriptions, and Table 10, Section IV. Environmental Impact, page 109, for data on existing pedestrian flow and sidewalk levels of operation.)

NOTES - Transportation, Circulation and Parking

/1/ San Francisco City Planning Commission, Resolution 6834, April 27, 1972, Comprehensive Plan, Transportation Element, page 25.

/2/ San Francisco Comprehensive Plan, Transportation Element, page 23.

/3/ The parking inventory survey was conducted by TJKM on January 20-23 and 26, 1981 and July 20-22, 1981.

/4/ Parking observations were conducted by TJKM on August 11, 1981.

G. AIR QUALITY

The Bay Area Air Quality Management District (BAAQMD) operates an air quality monitoring station approximately 2.8 miles south of the site at

900 23rd Street. A three-year summary of the data collected at this station (and at the previously operated station at 939 Ellis Street) and the corresponding ambient air quality standards are shown in Appendix E, Table E-2, page 290 These data show that San Francisco itself experiences few violations of state and federal ozone, carbon monoxide (CO), total suspended particulate (TSP), and nitrogen dioxide (NO_2) standards.

San Francisco's air quality, in general, is the least degraded of all the developed portions of the Bay Area. The prevailing westerly and northwesterly winds tend to carry pollutants from the City toward the East Bay and South Bay. Annual fluctuations in air quality are due to a combination of meteorological factors, which vary unpredictably, and pollutant emissions, which have been decreasing in the Bay Area and are expected to continue to do so in the near future, due primarily to federal- and state-mandated auto emission controls (unless federal standards are lowered). Highest annual pollutant concentrations in San Francisco, while exhibiting fluctuations due to meteorology, have shown an overall improvement during the 1970-1979 period. However, annual numbers of exceedances of air quality standards have not shown any clear overall trend during the same period. In 1979, carbon monoxide and particulate standards were exceeded a total of three times.

The entire Bay Area Air Basin has been designated by the California Air Resources Board as a nonattainment area for ozone (oxidant) and carbon monoxide, and San Francisco is a nonattainment area for particulate (i.e., the standards for these pollutants are now and are expected to continue to be exceeded). A regional Air Quality Plan was recently adopted which establishes control strategies to attain and maintain the standards by 1982 or 1987./1/

NOTE - Air Quality

/1/ Association of Bay Area Governments, BAAQMD, and Metropolitan Transportation Commission, January 1979, 1979 Bay Area Air Quality Plan, San Francisco Bay Area Environmental Management Plan. The Federal Clean Air Act Amendments of 1977 mandate that the ozone, carbon monoxide, and particulate standards be attained by 1982, although a five-year extension to 1987 is possible in the case of ozone and carbon monoxide.

H. NOISE

As is typical of Downtown San Francisco, the noise environment of the project site is dominated by vehicular traffic noise. The Environmental Protection Element of the Comprehensive Plan indicates an existing day-night average noise level (Ldn) of 65 dBA on Washington Street and 70 dBA on Montgomery Street./1,2/

NOTES - Noise

/1/ dBA (decibel) is a logarithmic unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called "sound level"), measured in decibels. The "A" denotes the A-weighted scale, which simulates the response of the human ear to various frequencies of sound.

/2/ Ldn, an averaged sound level measurement, based on human reaction to cumulative noise exposure over a 24-hour period, which takes into account the greater annoyance of nighttime noise. (Noise between 10 p.m. and 7 a.m. is weighted 10 dBA higher than daytime noise.)

I. ENERGY

Pacific Gas & Electric Company (PG&E) serves the site with gas distribution mains and underground electric facilities. PG&E obtains a portion of its electrical energy from renewable resources, including geothermal and hydroelectric power, but will meet new demands for energy primarily by increasing the use of nonrenewable coal, oil, natural gas and nuclear fuels.

In response to a directive of the State Public Utilities Commission, PG&E will also be required to increase generating capacity from co-generation projects, which develop electricity in combination with industrial processes that already use fossil fuels as a source of heat. PG&E anticipates the construction of additional geothermal plants and increased purchases of electricity from other utilities; this power would come primarily from hydroelectric and other plants in the state of Washington.

Existing energy consumption on the project site is associated with the seven structures now occupying the site. The existing buildings were built before present State energy standards and may be less energy efficient, on a per-square-foot basis, than modern structures built to current standards.

J. GEOLOGY, SEISMICITY AND HYDROLOGY

GEOLOGY

The site is at the eastern base of Nob Hill, about 2,500 feet from San Francisco Bay. The topography of the general area is moderately sloping, with elevations on the site ranging from about six feet above San Francisco Datum (SFD) at Montgomery Street to about 13 feet at the west property line on Clay Street./1/ The site is just to the west (on the shore side) of the former shoreline of San Francisco Bay, which approximately paralleled the present Montgomery Street for about a block to the north and south of the site. The site was probably filled, at the same time as reclamation of nearby areas, with sand and rubble placed about 1850.

A preliminary geotechnical report based on data from surrounding sites has been used to estimate site conditions. Based on boring data for nearby building sites, subsurface conditions are expected to be layers of loose sand and fill, dense sand, and Old Bay Clay. In general, soil materials thicken and the depth to bedrock increases trending northeast./2/

Settlement would not be expected to be a potential geologic hazard because of the small area of the site underlain by Old Bay Clay susceptible to settlement. (Settlement occurs when sufficient loads are placed on, or above, compressible sediments to cause their compression, resulting in a lowering of the ground surface. Differential settlement would occur if a portion of a site were to sink with respect to the rest of the site.)

SEISMICITY

No active faults (faults which have a historic record or other geophysical evidence of movement within approximately the last 10,000 years) are known to exist within San Francisco. Several nearby active faults are potential sources of earthquakes that could affect San Francisco. These are the San Andreas Fault, located about 10 miles southwest of the site; the Hayward Fault, about 15 miles to the east; and the Calaveras Fault, about 30 miles to the east. Other active faults which have not been detected may exist in the Bay area.

Both the San Andreas and the Hayward Faults have a recent history of major and minor movement, and large and small earthquakes can be expected in this region in the future. Within the next 60 to 170 years (estimates of recurrence intervals vary), at least one earthquake of the magnitude of the 1906 San Francisco earthquake (about 8.3 on the Richter scale of magnitude), and several earthquakes comparable to the 1957 Daly City earthquake (Richter 5.3) can be expected to affect the proposed building./3,4/

Potential seismic hazards on the site include groundshaking, liquefaction, and seismically induced subsidence. Groundshaking on the site would be expected to be "strong" should a 1906-type earthquake occur, and would probably cause general but not universal fall of brick chimneys, and cracks in masonry and brick work./4/ The site is mapped in an area of major liquefaction potential./4,5/ Liquefaction would not be likely to occur on the site because the loose sand fill layer is above the water table and is not saturated./2/ The site is also mapped in an area of major potential subsidence hazard; subsidence would be caused by the compression of soil layers by earthquake vibrations./4/

HYDROLOGY

No water bodies, springs, or watercourses are located on the site, which is completely covered with structures. Under natural conditions, the site would receive runoff from higher ground to the north and west. Surface runoff is generally greatest during the November-to-April rainy season. The groundwater level below the site is at about Elevation -4 feet (SFD) but would fluctuate seasonally./2/

NOTES - Geology, Seismicity and Hydrology

/1/ San Francisco Datum is based on a reference point for surveying and vertical distance measurements. The elevation of the San Francisco Datum is 8.6 feet above mean sea level.

/2/ Dames & Moore, July 21, 1981, Foundation Investigation - Phase I, Preliminary Study, Proposed Office Building, Montgomery and Clay Streets, San Francisco, California, prepared for Bank of Canton of California Building Corporation.

/3/ The Richter Scale is a logarithmic scale developed to measure earthquake magnitude by the energy released.

/4/ Blume, John A., and Associates, June 1974, San Francisco Seismic Safety Investigation, prepared for the Department of City Planning, City of San Francisco.

/5/ Liquefaction is the transformation of granular material, such as loose wet sand, into a fluid-like state similar to quicksand.

IV. ENVIRONMENTAL IMPACT

An initial environmental evaluation by the Department of City Planning resulted in the December 1980 determination that an Environmental Impact Report was required for this project. During the initial evaluation, operational noise and biology effects were found to require no further consideration. (See Appendix AA, pages 244-250.) Therefore, this DEIR does not discuss these two issues./1/

A. LAND USE AND ZONING

SAN FRANCISCO COMPREHENSIVE PLAN

The proposed project would respond to general objectives of the San Francisco Comprehensive Plan, and to the City Planning Code objective that the C-3-0 Downtown Office District play a leading national role in finance, corporate headquarters and service industries, and serve as an employment center for the region.

The project height of 282 feet would be 38 feet and 118 feet lower, respectively, than the maximum permitted heights of 320 feet and 400 feet, the two height limits for the project site. The building length of about 130 feet would be about 70 feet less than the maximum permitted 200 feet, and the maximum diagonal dimension of about 167 feet would be about 33 feet less than the maximum permitted diagonal dimension of 200 feet (applicable above a height of 150 feet). The project's gross office space square footage of 230,440 square feet would produce a floor area ratio (FAR) of 14:1, the maximum permitted in the C-3-0 District. The 6,600-gross-square-foot Pacific Heritage Museum in the Old Sub-Treasury Building has not been included in the 14:1 FAR cited above. If it were included in the FAR calculation, the project FAR would be 14.4:1 and would exceed that permitted in the C-3-0 District under present Interim Controls (City Planning Code, Section 124)./2/

The project sponsor has requested exclusion of the Sub-Treasury floor area from gross FAR on the grounds that the landmark would be restored for public use, based on an interpretation of City Planning Code Article 10. This request is under review by the Zoning Administrator.

The proposed project would be consistent with Objective 6 of the Commerce and Industry Element of the Comprehensive Plan, to maintain and improve San Francisco's position as a "prime location for financial, administrative, corporate, and professional activity," (page 24) and with Policy 2 of that objective through the maintenance of "a compact downtown core" (page 25).

LAND USE

The Old Sub-Treasury Building at 608-610 Commercial Street would be restored as a proposed Pacific Heritage Museum, and incorporated into the project. The museum would have public access from Commercial Street (see Figure 4, page 20) including a shuttle elevator for handicapped access. The museum is proposed to incorporate and display interior architectural elements of the Sub-Treasury Building, and exhibits relating to the art, culture and history of Asian and Pacific region immigrant groups in California. The restoration of the Sub-Treasury Building would respond to Objective 2, Policy 4 of the Urban Design Element of the Comprehensive Plan (page 25), which reflects the City's desire to "Preserve notable landmarks and areas of historic...value" (see also Section IV.C., Environmental Impact, Cultural and Historic Resources, page 81).

The office component of the project would be consistent with existing land uses in the vicinity, including the 601 Montgomery Street office building, the approved Montgomery-Washington project north of the project site, the Transamerica Pyramid, one block northeast of the project site, and other combined office-commercial structures in the Financial District. It would contrast with residential-retail land use in Chinatown to the west.

GUIDING DOWNTOWN DEVELOPMENT

In May 1981, the Department of City Planning published Guiding Downtown Development (GDD), a report containing regulatory proposals for development in downtown San Francisco. (See Section VII., Alternatives, page 146, for a project alternative conforming with the recommendations contained in GDD.) The relationship of the project to the major proposals of GDD is discussed below. GDD recommends that the base FAR for the project site be changed from 14:1 to 12:1, with a maximum additional FAR of 5:1 allowable for the following uses: up to 5:1 FAR for residential uses; up to 0.5:1 FAR for retail uses of less than 2,000 square feet each; and up 3:1 FAR for transfer of unused development rights from sites of listed historically or architecturally significant buildings. The gross office floor area of the project would exceed the GDD-recommended FAR of 12:1 by 2:1, or about 33,000 square feet. The total floor area of the project, including the restored Old Sub-Treasury Building, would exceed the GDD-recommended FAR by 2.4:1.

GDD proposes an FAR bonus of up to 50 percent of the floor area of a restored building for restoration of significant structures. The project could qualify for a bonus of up to 3,300 square-feet for restoration of the Old Sub-Treasury Building under this proposed provision. Public works of art, valued at one percent of construction costs, are recommended in GDD. Art work would be exhibited as part of the proposed Pacific Heritage Museum in the restored Old Sub-Treasury Building./3/ GDD-recommended policies would require that one square foot of public open space, recreation or cultural facility be provided for every 25 square feet of gross building floor area. If applied to the project, this would be about 9,200 square feet. The 9,000 square foot Pacific Heritage Museum (including the roof-top open space) would provide about 98 percent of this requirement. The project would not include ground-floor retail space, encouraged by GDD.

GDD would require that the average floor area of floors above the midpoint of the building be about two-fifteenths less than the average floor area of floors below the midpoint. The project would not conform to this recommendation. Average area of the project floors, about 14,000 square feet, would be less than the 20,000-square-foot average floor area maximum proposed in GDD. At 282 feet, the project would exceed the proposed 250-foot GDD height limit for the western portion of the site by 32 feet. The project would be below the 320 foot limit proposed for the eastern portion of the site.

GDD recommends that 640 square feet of housing be constructed for each 1,000 square feet of office space, or about 147,000 square feet for the project, based on project-generated residential demand. The Bank of Canton would participate in the City Housing Production Program for provision of housing off-site. (See Section V., Mitigation Measures, page 131)

NOTES - Land Use and Zoning

/1/ "Notice that an Environmental Impact Report is Determined to be Required," EE 80.296, Bank of Canton Headquarters, issued December 5, 1980, Department of City Planning. See Appendix AA, pages 244-250.

/2/ City Planning Commission Resolution No. 8474, January 17, 1980. Board of Supervisors Ordinance 240-80, June 1, 1980, established interim limitations on use of floor area bonuses in effect until July 1, 1981. This ordinance was extended in June 1981 until September 1, 1981, and subsequently until March 1, 1983.

B. URBAN DESIGN, SHADOW, AND WIND EFFECTS

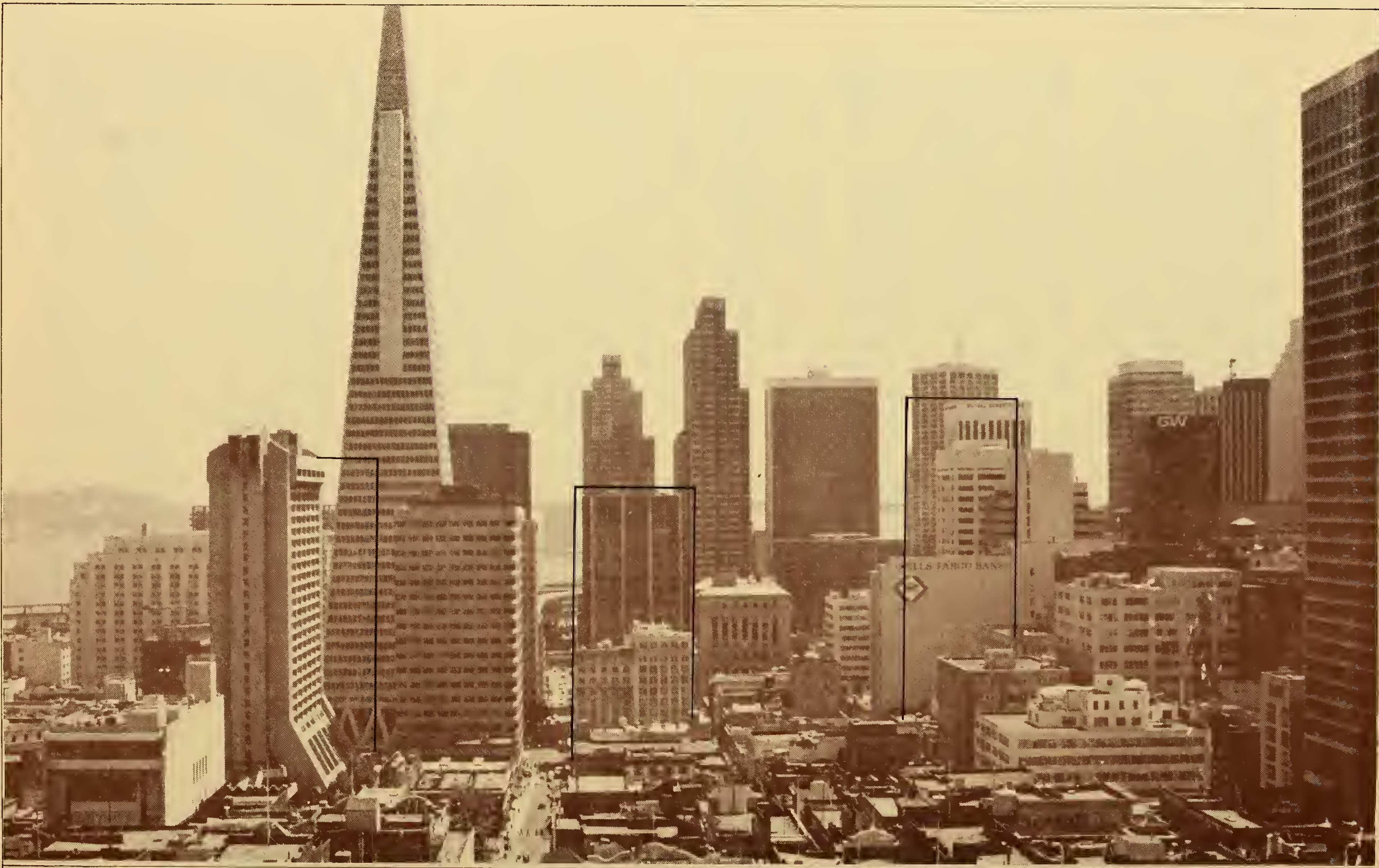
VISUAL IMPACTS

The project would include demolition of four of the five small-scale structures on the site and construction of an 18-story building, about 282 feet in height. The proposed building would contribute to the cluster of high-rise structures at the northern boundary of the Financial District, (the so-called "urban-canyon" effect) including 601 Montgomery Street, the Transamerica Pyramid, the 456 Montgomery Street building, under construction, and the approved Montgomery-Washington building. The project design is intended by the architect to relate visually to Montgomery Street through street-level window treatment of the Montgomery Street facade. Window bays would be similar in scale to those of the Bank of America building at 552 Montgomery Street, across the street from the project. The project would relate to Commercial Street by incorporation of the Old Sub-Treasury Building as an element of the Commercial Street frontage. Views of the project from adjacent streets would include all, or part of, the project tower. From nearby locations on Clay, Montgomery and Commercial Streets, views of the project would include the full height of the tower. This would alter the existing visual setting of the Old Sub-Treasury Building as now seen among one- to four-story structures, and create a contrast in scale between the Sub-Treasury and the office tower. At street level on Commercial Street adjacent to the project, the setback of the office tower from the Old Sub-Treasury Building frontage would reduce the visual impact of the full height of the project. (See Figure 11, page 28.) North of the site on Montgomery Street, however, views of the project tower would be blocked by the 601 Montgomery Street building and the proposed Montgomery-Washington building.

The project would interrupt views to the south from the windows in the south wall of the 601 Montgomery Street building. From this building, the project would replace views of office towers further south in the Montgomery - California Street area of the Financial District. The project would interrupt views to the southwest from portions of the Transamerica Pyramid below the twentieth floor. Views to the southeast from the Chinatown Holiday Inn would be partially blocked by the project. These views are now interrupted by the 601 Montgomery Street building. Views from the upper floors of the 552 Montgomery Street building of Portsmouth Square and of buildings on Nob Hill to the west would be blocked by the project. From Portsmouth Square, the project would partially block views of some buildings to the east; it would not obstruct any views of the Bay (see Figure 22a, page 69a).

The project would be visible in the downtown skyline from some long-range view points. The proposed structure would not be visible from Telegraph Hill, because of the Transamerica Pyramid, 601 Montgomery Street building, other existing structures, and the Montgomery-Washington Building to be constructed. From Chinatown, the project would be visible south of the 601 Montgomery Street building (see Figure 22). The rectangular shape of the tower would be similar in general height and form to other nearby structures, including the 601 Montgomery Street building, the 475 Sansome building and the 456 Montgomery Street building (the latter is under construction).

When viewed from long-range viewpoints to the northeast, north and west, the project would not serve as a major visual focus due to the prominence of taller structures in the downtown skyline. The project would not be visible, due to intervening structures, from the southern approaches to the City on the

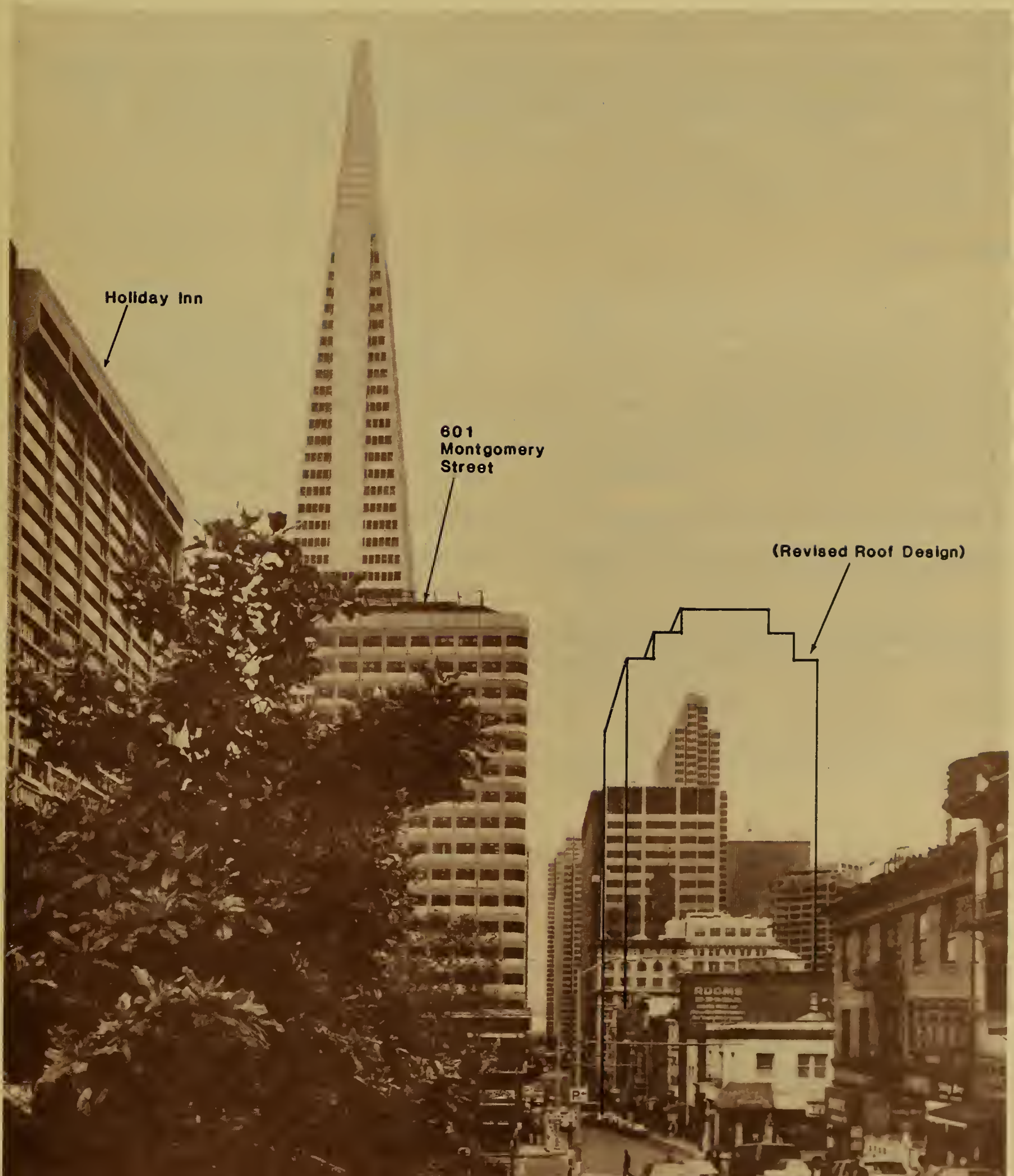


PROPOSED STRUCTURES: ▲ Montgomery - Washington Building ▲ **Project** ▲ 456 Montgomery St. (Under Construction)

EXISTING STRUCTURES: ▲ Holiday Inn ▲ 601 Montgomery St. ▲ Transamerica Pyramid

FIGURE 22: View from Chinatown (Powell and Clay Streets)

SOURCE: Environmental Science Associates, Inc.



● Figure 22a: View from Portsmouth Square (Clay Street near Brenham Place)

SOURCE: Environmental Science Associates, Inc.

James Lick and Bayshore freeways or from Potrero Hill. Views to the north from the site would include the 601 Montgomery Street building and the tapered Transamerica Pyramid. Views to the east and south would include medium- and high-rise buildings in the Financial District. To the west, views would include Chinatown and Nob Hill.

URBAN DESIGN

The project is intended by the architects to relate architecturally to existing buildings in the site vicinity. The banking hall facade and window design would provide a base element relating to the pedestrian-level scale of Montgomery Street. The inclusion of the Old Sub-Treasury Building and a one-story extension of the banking hall, with the office tower set back about 16 feet above these two elements, is intended by the project architects to relate to the existing scale of Commercial Street.

The Urban Design Element of the San Francisco Comprehensive Plan provides a basis in City policy for summarizing the urban design effects of the proposed project (see Table 4, page 71).

SHADOWS

Light and shadow patterns on streets and sidewalks in the project vicinity are cast primarily by nearby existing high-rise structures. The major buildings producing existing shadows in the area include the 601 Montgomery Street building, the Chinatown Holiday Inn, the Transamerica Pyramid, and the Wells Fargo Annex at 475 Sansome Street. Portions of Clay Street and Montgomery Street are shaded by existing structures throughout the day at all seasons of the year. Existing shadow patterns and expected patterns with the project for different times of the day and year are shown in Figures 23, 24, and 25, pages 74-76.

The project, in replacing low-rise structures on the site, would create more extended shadow patterns than at present. Some of the shadow patterns would overlap those cast by existing structures in the area (601 Montgomery Street, Transamerica Pyramid, Holiday Inn).

TABLE 4: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE SAN FRANCISCO COMPREHENSIVE PLAN* AND THE PROPOSED PROJECT

URBAN DESIGN POLICIES	RELATIONSHIP OF PROJECT TO POLICIES
A. Policies for City Pattern	
1. Policy 1. "Recognize and protect major views in the City, with particular attention to those of open space and water." (p. 10)	The project site is outside major designated view corridors along Pine Street and California Street. The project is outside the "Portsmouth view corridor", but would remove views of Portsmouth Square from buildings across the street from the site on Montgomery.
2. Policy 3. "Recognize that buildings, when seen together, produce a total effect that characterizes the City and its districts." (p. 10)	The project would be visible, but not prominent, in views of the skyline. Together with the adjacent high-rise buildings, the project would define the northern edge of the Financial District, as part of a group of rectangular towers of similar height.
3. Policy 6. "Make centers of activity more prominent through design of street features and by other means." (p. 12)	The museum planned in the Old Sub-Treasury Building of the project would provide street-level interest.
B. Policies for Conservation	
4. Policy 4. "Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development." (p. 25)	The project would incorporate and restore a designated City Landmark, the Old Sub-Treasury Building. Other buildings on the site are not included in the City Planning Commission's List of Historically and/or Architecturally Significant Buildings in the Downtown.

TABLE 4: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE SAN FRANCISCO COMPREHENSIVE PLAN* AND THE PROPOSED PROJECT (Continued)

5. Policy 6. "Respect the character of older development nearby in the design of new buildings." (p. 25)	The project would be a departure in style and scale from buildings on Commercial Street and of Chinatown to the west. The project tower would be larger in scale than the existing buildings on Commercial Street and the Sub-Treasury Building. The project would incorporate varied surface treatments in base, tower and top elements to relate to older structures in the area.
Policies for Major New Development	
6. Policy 1. "Promote harmony in the visual relationships and transitions between new and older buildings." (p. 36)	See Items 2 and 5 above. The project would incorporate the Old Sub-Treasury Building with the office tower set back above, to relate to the existing scale of Commercial Street. An extension of the banking hall is intended to maintain the existing pattern of building to the sidewalk frontage on Commercial Street. The tower would contrast in scale with the Sub-Treasury and other low-rise buildings on Commercial Street.
7. Policy 2. "Avoid extreme contrasts in color, shape and other characteristics which will cause new buildings to stand out in excess of their public importance." (p. 36)	The project facade would be light-colored material with tinted non-reflective glass. The banking hall would contain no reflective glass or high-intensity lighting and would not impose reflective or glaring on other properties or nearby roadways.
8. Policy 4. "Promote building forms that will respect and improve the integrity of open spaces and other public areas." (p. 36)	The project is not adjacent to an open space. When viewed from Portsmouth Square, the project would be part of a group of structures of similar height and forms east of the square. The project would increase shadows on adjacent streets and

TABLE 4: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE SAN FRANCISCO COMPREHENSIVE PLAN* AND THE PROPOSED PROJECT (Continued)

	sidewalks and in Portsmouth Square and Redwood park. The project would block views of Portsmouth Square from some buildings east of the site. It would not block views of the Bay.
9. Policy 5. "Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development." (p. 36)	See Items 2, 5 and 7 above. The project would be comparable in height to the nearby Holiday Inn and 601 Montgomery Street buildings, and shorter than the Transamerica Pyramid to the east. The project would be taller than nearby low-rise buildings to the west. The overall effect would be to add to the cluster of similar-sized rectangular towers at the northern end of the Financial District.
10. Policy 6. "Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction." (p. 37)	See Items 2, 5, and 7 above. The maximum horizontal dimensions of the project would be comparable to those of nearby structures in the Financial District. The project would be considerably greater in bulk than older low-rise buildings outside the C-3-0 district, in the Jackson Square Historic District to the northeast and Chinatown to the west.
D. Policies for Neighborhood Environment	
11. Policy 13. "Improve pedestrian areas by providing human scale and interest." (p.57)	The museum planned in the Commercial Street frontage of the project would provide street level interest. The base element of the tower is intended to relate to the pedestrian scale of Montgomery and Commercial Streets.

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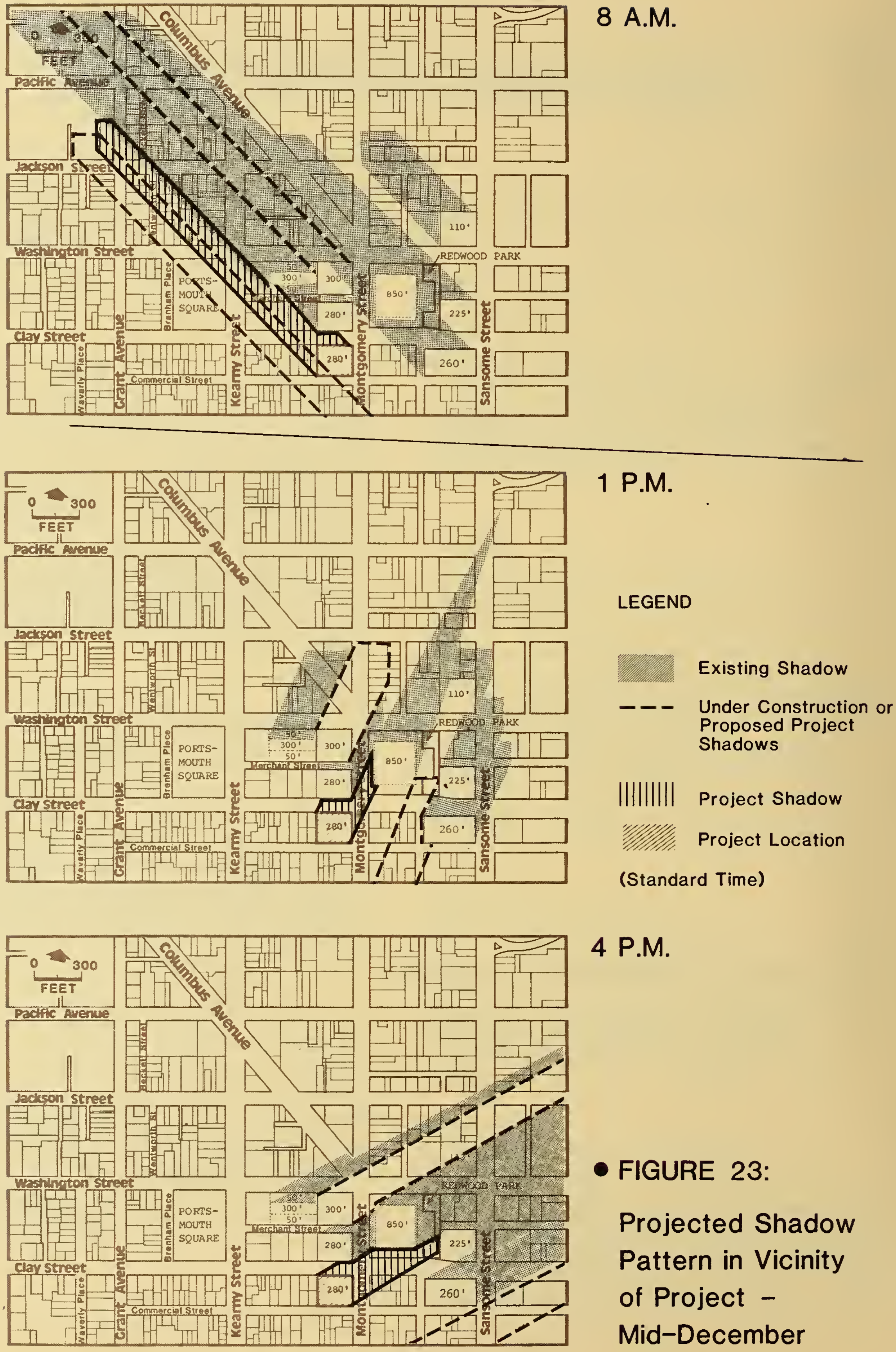
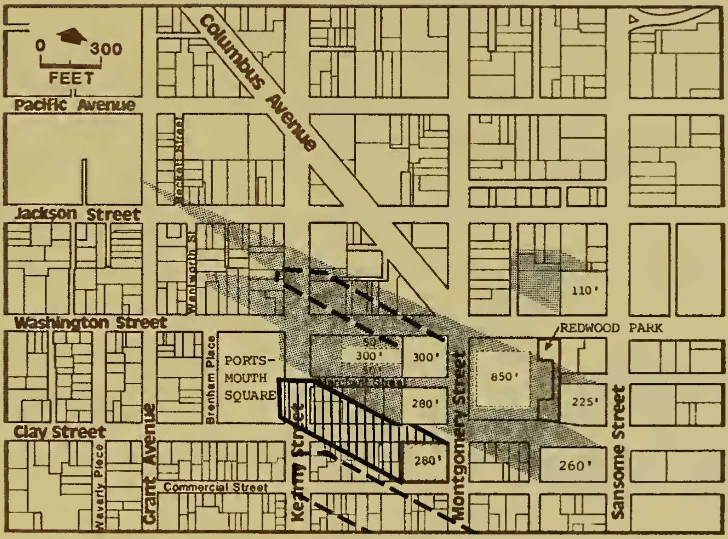
*City and County of San Francisco, 1971, Comprehensive Plan, Urban Design Element. (page references shown in parentheses).

SOURCE: Environmental Science Associates.

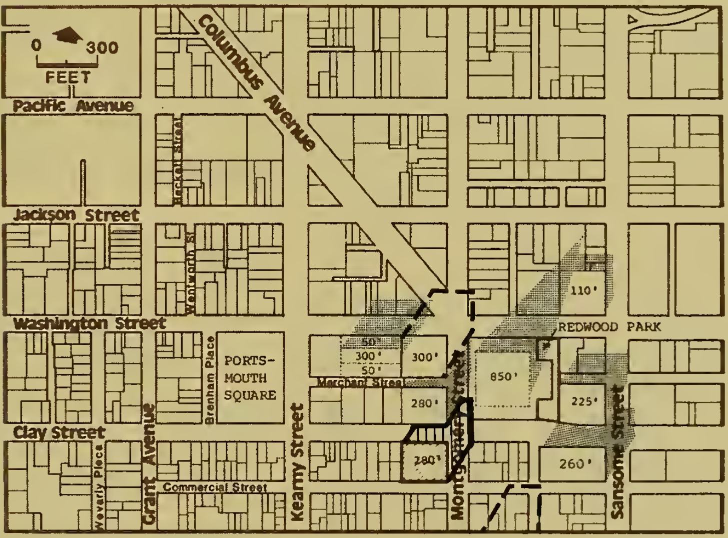


● FIGURE 23:

Projected Shadow Pattern in Vicinity of Project – Mid-December



8 A.M.



1 P.M.

LEGEND

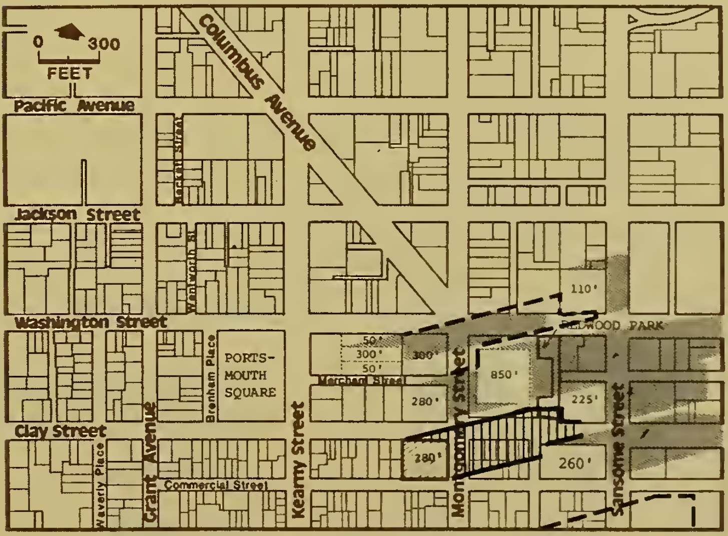
▒ Existing Shadow

– – – Under Construction or Proposed Project Shadows

|||||||| Project Shadow

▨ Project Location

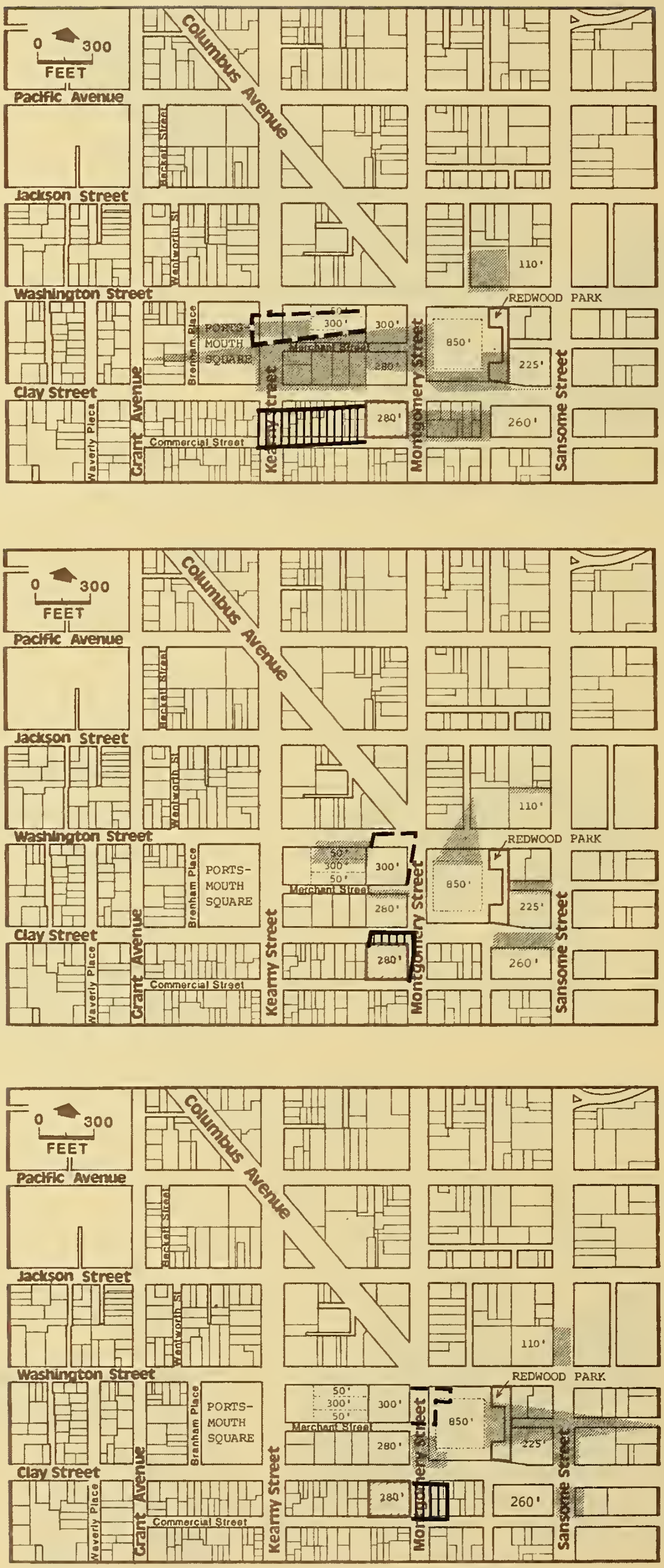
(Standard Time. September clock times would be one hour later.)



4 P.M.

- **FIGURE 24:**

Projected Shadow Pattern in Vicinity of Project – Mid-March and Mid-September



8 A.M.

1 P.M.

4 P.M.

LEGEND

▒ Existing Shadow

– – – Under Construction or Proposed Project Shadows

||||||| Project Shadow

▨ Project Location

(Daylight Savings Time)

● FIGURE 25:

Projected Shadow Pattern in Vicinity of Project – Mid–June

During morning hours in winter months, the project would cast shadows on Clay Street sidewalks, and would shade the northeasterly corner of Portsmouth Square. This area contains a playground and benches. The shadows would overlap those cast by the 456 Montgomery Building, now under construction. During midday hours the project would cast shadows on the west and south sidewalks around the Transamerica Pyramid. During mid- to late-afternoon hours, project shadows would eliminate a sunlight corridor on the south sidewalk of the Transamerica Pyramid (the north sidewalk of Clay Street) and the southern portion of Redwood Park, a plaza maintained for public use as part of the Transamerica Pyramid (see Figure 23, page 74).

During morning hours in spring and fall the project would shade Kearny Street and sidewalks adjacent to Portmouth Square, and add shading to Clay Street and its sidewalks. During midday hours, the project would shade the southwesterly sidewalk of the Transamerica Pyramid at Clay and Montgomery Streets and the Montgomery Street sidewalks south of Clay Street The project would shade the southerly portion of Redwood Park in mid-afternoon hours (see Figure 24, page 75).

In summer months, in early mornings, project shadows would be cast on Kearny Street and Clay Street sidewalks. During midday hours, the project would eliminate a sunlight corridor on the north sidewalk of Clay Street near Montgomery Street (see Figure 25, page 76). In early afternoon hours, the project would add to shading of the north sidewalk of Clay Street east of Montgomery Street fronting the Transamerica Pyramid.

WINDS/1/

The most frequent wind direction during most months is from the west. On an annual aggregate basis, west winds blow nearly half of the time. West winds are also the strongest, averaging over seven miles per hour (mph) year-round. Southwest winds are typically the second most frequent and second strongest winds. Northwest winds have had the second highest average speed during some years.

Wind speeds at pedestrian level can be predicted by comparing "wind speed ratios," the ratios of pedestrian-level wind speed to the speed above the wakes of surrounding buildings (called the freestream wind speed). /2/ For San Francisco, the commonly used definitions of pedestrian-level wind speed ratio ranges are as follows: /3/

Wind Speed Ratio	Ratio of Pedestrian Level Wind Speed to Freestream Wind Speed
Low	0.00 - 0.19
Moderately Low	0.20 - 0.29
Moderate	0.30 - 0.49
Moderately High	0.50 - 0.69
High	0.70 - 1.00
Very High	Greater than 1.00

Wind tunnel tests of localized wind speeds and directions at and near the project site were conducted using a scale model of the site and vicinity. The study included separate tests of west, southwest, and northwest winds, all under existing conditions, and with the proposed project.

West Winds

For west winds, the existing near-surface (street-level) wind speed ratios are generally low or moderately low except for a steady, moderate wind along Sacramento Street (where wind speed ratios reach as high as 0.45) and a moderate wind along Clay Street just north of the site. The wind along Clay Street results from a vertical vortex downwind of the 601 Montgomery Street building and increases in speed, from a wind speed ratio of 0.11 to a ratio of 0.32, as it approaches Montgomery Street. (A vortex is a wind moving in a circular pattern.) The vortex extends down to street level and causes moderately low gusty winds at the intersection of Montgomery and Clay Streets (wind speed ratios of 0.23 to 0.29). The Sacramento-Kearny, Sacramento-Montgomery, Merchant-Montgomery, and Washington-Montgomery intersections also have unsteady and gusty winds, with low and moderately low magnitudes (wind speed ratios of 0.16 to 0.29). Reversing winds (winds that periodically reverse direction) are present with moderately low magnitudes on Commercial Street near Montgomery Street, and with low magnitudes on

Merchant Street near Montgomery. Both the north and south edges of the Transamerica Pyramid shed strong vertical vortices.

The project would result in three primary changes: (1) the wind speeds on Commercial Street south of the building would double, from a wind speed ratio of 0.23 (moderately low) to 0.45 (moderate); (2) the wind speed ratio on Clay Street would increase 35 percent from 0.32 to 0.43 (both moderate), an effect that would increase the existing wind acceleration along Clay Street; and (3) there would be increases in the strength of the gusty winds at the Clay-Montgomery intersection by 50 percent, from 0.29 (moderately low) to 0.37 (moderate). The project would also reduce wind speeds along Sacramento Street by about 10 percent; increase gustiness at the southwest corner of the Transamerica Pyramid by 10 percent from 0.22 to 0.24 (both moderately low); eliminate the reversing flow on Commercial Street; and increase the wind speed ratio along Clay Street east of Montgomery Street from 0.17 to 0.24 (from low to moderately low).

Southwest Winds

The project site and the surrounding blocks are within the wake of the Bank of America headquarters at 555 California Street. Present southwest wind flows in this large wake have high intensities of turbulence, with low magnitudes (wind speed ratios of 0.09 to 0.21) except on Merchant Street and Washington Street, where there are moderately low to moderate wind speeds (0.24 to 0.40). Street-level winds on Clay and Sacramento Streets flow from east to west and are unsteady, and street-level winds at the Clay-Montgomery, Sacramento-Montgomery, and Sacramento-Kearny intersections are unsteady and gusty, but wind speed ratios at all these locations are low.

Changes in wind flows due to the project would be minor. Wind speeds would decrease by nearly 20 percent at the Washington-Montgomery intersection and increase slightly along Montgomery Street. Gustiness would decrease at the Clay-Montgomery and Sacramento-Kearny intersections and increase at the Merchant-Kearny intersection. The east to west wind on Sacramento and Clay Streets between Kearny and Montgomery Streets would disappear or diminish.

Northwest Winds

The existing pedestrian-level wind speed ratios for northwest winds are generally low or moderately low (ranging from 0.11 to 0.27) except at the Washington-Montgomery intersection and on Sacramento Street east of Montgomery Street, where the wind speed ratios are moderate (0.47 and 0.38, respectively). Gusty winds occur at the Clay-Montgomery and Commercial-Montgomery intersections, but wind speed ratios at these locations are moderately low. Winds along Clay Street directly north of the project site accelerate from a ratio of 0.17 to 0.27 over a one-half-block distance. The downwind edges of the Transamerica Pyramid shed strong vertical vortices. A strong steady wind blows along Columbus Avenue and splits on the northwest edge of the Transamerica Pyramid; most of the wind turns east onto Washington Street.

The project would increase wind speeds by about 140 percent on Commercial Street directly south of the project site, from a wind speed ratio of 0.18 (low) to 0.43 (moderate), with minor flow reversal. Winds at the Commercial-Montgomery intersection would stay essentially the same. Wind speeds at the Clay-Montgomery intersection would increase, from low and moderately low wind speed ratios (about 0.20) to moderate ratios (about 0.40), due to a vertical vortex which would form at the northeast corner of the proposed building. Wind speeds would increase 44 percent on Clay Street; winds would accelerate more rapidly north of the proposed building than existing winds at that location. The following minor changes would also occur: wind speeds would decrease slightly on Kearny Street; the wind speed ratio at the Washington-Montgomery intersection would decrease 19 percent; gustiness at the Washington-Kearny intersection would increase but would still be low in magnitude; and wind flow along Clay Street east of Montgomery Street would increase slightly.

Summary

Pedestrian discomfort begins to appear at wind speeds of about 12 mph. Pedestrian discomfort from the project would not occur frequently in the project vicinity because, based on wind speed ratios due to the project, freestream upper-level wind speeds of about 25 to 63 mph for northwest winds and 26 to 50 mph for westerly winds would be required for street-level winds to reach 12 mph. Wind speeds greater than 25 mph occur three percent and less than six percent of the time for northwesterly and westerly winds, respectively.

NOTES - Urban Design, Shadow, and Wind Effects

/1/ This section is based upon a report, entitled "Wind-Tunnel Studies of the Bank of Canton Building", December 1981, prepared by Dr. Bruce White as a subconsultant to Environmental Science Associates, Inc. A copy of this document is included in Appendix A, pages 251-272

/2/ The meteorological instruments used for recording the available data on wind speeds and directions were placed so that they essentially measured the freestream wind speeds.

/3/ Wind speed ratios are not actual wind speeds. A point having "very high" wind speed ratio could still experience light winds on a near-calm day. Likewise, a point found to have "low" wind speed ratio could experience discomforting winds on an extremely windy day.

C. CULTURAL AND HISTORIC FACTORS

The project would restore and incorporate the Old Sub-Treasury Building at 608-610 Commercial Street, City Landmark No. 34, and a building on the City's list of architecturally significant buildings./1/ This structure is considered worthy of preservation, even in its present (1981) altered state, because of its historic and architectural value and relationship to existing buildings on Commercial Street./2/

● Project restoration plans would include development of the Sub-Treasury basement and main floor as the Pacific Heritage Museum, financially supported by the Bank of Canton and planned to include exhibits of the art, culture and history of Asian immigrant groups in California. The museum would also include exhibits of the interior elements of the structure, including the coin vault, decorative columns, and interior brick walls. Except for proposed reproduction of one decorative column, removed during post-earthquake reconstruction of the Old Sub-Treasury Building, all these architectural elements are now present in the structure; these elements would remain in place. Figures 3 and 4, pages 19-20, indicate locations of the coin vault and the decorative columns. A portion of the main floor above the coin vault would be exposed to display the floor system. The basement coin vault would be made visible from the main floor, and portions of the steel beam and corrugated iron arch floor system would be exposed. The proposed restoration would require structural reinforcement, provision of secondary access, and replacement of the existing roof and skylight to meet current Building Code standards (see Figures 3-5, pages 19-21).

About 400 square feet of the northeast corner of the Old Sub-Treasury Building, about 10 percent of the building, would be removed to allow for basement circulation and elevator shafts for the project's office tower. This area of the Old Sub-Treasury now contains stairs to the Sub-Treasury basement, washrooms, and portions of two interior brick walls. The location of these stairs corresponds to those in original plans of the Sub-Treasury; the washrooms are a later addition. Use of this corner for the office core would require removal of about 40 linear feet of exterior brick wall, portions of interior brick walls, the stairs and washrooms. The project tower would be structurally separate from the existing Sub-Treasury Building, and would be set back 16 feet from the Commercial Street facade (see Figures 7 and 8, pages 23-24). This would alter the visual setting of the designated landmark.

The other structures proposed to be demolished on the site are not listed in the City's List of Architecturally and/or Historically Significant Buildings, or rated in DCP or Heritage Surveys./1/

NOTES - Cultural and Historic Factors

/1/ List of "Architecturally and/or Historically Significant Buildings in the C-3 Zoning Districts," City Planning Commission, May 29, 1980.

/2/ Discussion of the Old Sub-Treasury Building is based on Architectural and Historical Assessment - Old Sub-Treasury Building, 608 Commercial Street, San Francisco, California, by Charles Hall Page & Associates, June 26, 1981 and September 18, 1981. This report is on file (EE80.296) at the Office of Environmental Review, 450 McAllister Street, Room 319, and available for public review.

D. EMPLOYMENT, HOUSING, AND FISCAL FACTORS

EMPLOYMENT

Office and Retail Space

The proposed project would result in the demolition of four of the five existing buildings on the site which include about 52,200 gross (46,980 net) square feet, containing 47,300 gross (42,615 net) square feet of office space, 800 gross (675 net) square feet of commercial (restaurant) space and 4,100 gross (3,690 net) square feet of residential hotel space (see Table 5).

New construction on the site would include 230,440 gross square feet of office and banking space. The project would result in a net increase of 193,140 gross square feet of office space, and a net loss of about 800 gross square feet of commercial space and 4,100 gross square feet of residential space from the site.

During construction, the Bank of Canton would temporarily relocate its branch banking and administrative offices to 636 Clay Street, and would move its support staff to its Oakland branch. The Bank expects to employ about 65 persons in the new building, about the same number as it currently employs on the site. Five other businesses, employing about 105 people, would be displaced by the construction of the project (see Table 5). Those tenants currently renting office space on the site would be offered space in the proposed project. Four of the existing tenants have no specific relocation plans, although they would prefer to remain in the Financial District. Most expressed concern over the anticipated difficulty in finding affordable space in a comparable location. One tenant, Jackson Hu Associated Agencies, plans to relocate to another site in San Francisco. About four persons employed by the restaurant would be permanently displaced from the site./1/

TABLE 5: EXISTING USES AND EMPLOYMENT ON PROJECT SITE

Address	Tenant	Use	Net Sq. Ft.	Employees
617 Clay St.	Chinese Folk Dance Association	office	900	0
619 Clay St.	Jackson Hu Associated Agencies	office	675	5
621 Clay St.	Vacant	residential hotel	3,690	0
623 Clay St.	Wing Ho Lau	restaurant	675	4
631 Clay St.	MBT Associates	office	15,200	70
	Forell/Elsesser Engineers, Inc.	office	3,700	24
604 Commercial St.	AMROC International	office	1,090	3
	MBT Associates	office	1,090	*
531-555 Montgomery St., 608-610 Commercial St.	Bank of Canton	bank/office	19,960	65
		TOTAL	46,980	171

* Employees counted at 631 Clay Street.

SOURCE: Bank of Canton of California

Project-Related Employment

About 880 permanent jobs would be provided within the project, including Bank of Canton employment. This includes 65 Bank of Canton employees, one employee per 250 gross square feet in the remainder of the building, and 10 maintenance employees. No office tenants are secured at this time. The net increase in employment at the site, after subtracting jobs at the site in 1981, would be approximately 710.

Bay Area Employment Multiplier Effects

Secondary employment and income impacts would result from permanent project employment because each employed person would generate additional employment by his or her demands for goods and services. On the assumption that the new jobs created by the project would be primarily in the finance, insurance, and real estate (FIRE) sector, this growth would have an employment multiplier of 1.18, resulting in approximately 840 additional jobs in other sectors of the Bay Area economy./2/ The total number of Bay Area jobs that would be supported by growth in downtown employment due to the project would be about 1,550 (the 710 net project jobs plus the 840 jobs induced by the multiplier). Many of the jobs induced by the multiplier would be expected to be in San Francisco.

The project would require about 340 person-years of construction labor, during the 27-month construction period. On the assumption of a construction employment multiplier of 1.55, about 530 additional person-years of employment would be generated in the Bay Area as a result of project construction./2/

Office

The proposed project, together with other major downtown office buildings under construction, or approved, would add approximately 8.7 million gross square feet of office space if all were built (see Appendix C, Table C-1, page 278). If office employment in San Francisco continues to account for the same percentage of overall employment growth as it has in the past, projections by the Association of Bay Area Governments (ABAG) suggest that a net increase of about 1.25 million square feet of office space will be required each year between 1980 and 1985 to accommodate that growth./3/ Demand for office space, however, could be even greater. The ABAG projection indicates that 1.25 million additional square feet of office space will be occupied each year. This could either be because no more than that will be demanded or because no more will be supplied. Vacancy rates and rates of rent increase suggest that there is a backlog of demand. One commercial real estate broker foresees that by 1984, 9.1 million square feet of new office space will be available; all but about 2 million of this amount is currently leased./4/

The growth of office space would continue the trend of regional growth in service-sector and office headquarters activities and employment in San Francisco. The larger, newer buildings would be occupied primarily by larger tenants and those with the ability to pay higher rents.

New downtown office space and employment would increase the demand for retail goods, food services, and business services in the area. New space not occupied by firms providing these services would increase the demand for existing space and possibly for further new development.

From a cumulative perspective, multiplier effects would support additional employment in San Francisco and throughout the Bay Area in a number of different occupational groups. In addition, the construction industry, as noted above (page 85), would continue its activity while contributing to the area's economy through its own multiplier effects.

Housing

To the extent that the project would attract out-of-area employees and contribute to the formation of additional households by existing area residents, it would contribute to increased local housing demand.

Probable housing impacts caused by additional downtown employment are discussed in 101 Montgomery Street, Final EIR, EE 80.355, certified May 7, 1981, pages 71-75. This document is available for public review at the Department of City Planning, Office of Environmental Review, 45 Hyde Street, Room 319, and is hereby incorporated by reference into this EIR. In summary, this document states that due to relatively high wages and housing costs in San Francisco, many people are attracted to the employment opportunities, but are unable to afford housing. By 1985, it is projected that cumulative San Francisco housing demand resulting from Downtown office development will be about 17,000 units. This demand would exceed the projected growth in City housing stock by an estimated 9,000 to 12,000 housing units. The total demand would cause some Downtown employees to seek housing in other Bay Area locations.

Residency patterns for new employees generated by the project are based on the housing formula developed by the San Francisco Department of City Planning in a memorandum entitled "Housing Requirement for Office Development in San Francisco," July 1981, and by estimated residency patterns of Downtown office employees surveyed for five other recent Downtown EIRs (see Appendix C, Table C-2, page 279). About 40 percent would be expected to reside in San Francisco, 18 percent on the Peninsula, 30 percent in the East Bay, and 12 percent in the North Bay.

According to the Department of City Planning formula which assumes a maximum 40 percent of new Downtown employees residing in San Francisco, 1.8 employees per household, and an average of one employee per 250 gross square feet of office space, employment at the project would generate a demand for about 205 housing units in San Francisco. The net increase in housing demand generated by the project would be about 155 units, because the Bank of Canton would employ about the same number of persons (65) in the proposed project as it currently employs on-site./5/

- The project would result in the demolition of the vacant 22-unit residential hotel at 621 Clay Street. City Ordinance No. 330-81, Chapter 41 of the Administrative Code, regulates the demolition and conversion of residential hotel units to minimize adverse impacts on the housing supply and on displaced, low-income, elderly and handicapped persons resulting from the loss of such units. Ordinance 330-81 became effective June 15, 1981. This replaced Ordinance 15-81, effective January 2, 1981 (and amended by Ordinance 106-81, April 9, 1981). Ordinance 15-81 replaced the first residential hotel ordinance, Ordinance 564-79, first effective November 23, 1979. The ordinance is administered by the San Francisco Department of Public Works, Bureau of Building Inspection. The Superintendent of Building Inspection stated in February 1982, that "as long as the building is used exclusively by the Bank of Canton for purposes related to Bank of Canton operations, it will not be subject to the Residential Hotel Conversion and Demolition Ordinance. If the bank sells the building or uses it for other purposes, then [the bank] must comply with the Ordinance."/5A/ The Superintendent stated in June 1982, that "in as much as the Bank of Canton is, in effect, complying with Section 41.10 of the ordinance, and providing one-for-one replacement for 22 residential hotel units which would be demolished, the Superintendent proposes to issue a letter stating that the proposed Bank of Canton building has, in effect, complied with provision 41.10,...after the proposed replacement housing is under construction and the monies transferred to the Chinese Community Housing Corp."/5B/

- The project sponsor has acquired a 50-year lease on a site at Ninth Avenue and Clement Street, San Francisco, and has engaged an architect to design a new residential hotel of 21 units for that site. The new units would be managed under a 30-year lease by the Chinese Community Housing Corporation (CCHC), a non-profit corporation. The terms of the lease to CCHC would assure that rents would be kept at affordable levels for low-income persons. Initial monthly rents would be $100.00 for a single room and $125.00 for a double room, with increases not to exceed seven percent per year. This agreement has been structured to comply with applicable restrictions on the Bank of Canton's legal authority under the California Financial Code to build, operate and own residential property (California Financial Code, Section 750).

- The residential hotel proposed by the project sponsor would include 21 units with an average unit size of 135 square feet. There would be six handicapped-accessible toilets and shower rooms (two per floor), three community kitchens (one per floor), and a laundry room. Each room would have a closet, refrigerator and sink. The building would have a handicapped-accessible elevator, seven parking spaces and a 920 square-foot-rooftop deck with elevator access./5C/

- Because development of the residential hotel proposed at Ninth Avenue and Clement Street would provide 21, rather than 22 units, the project sponsor would propose to pay to the San Francisco Residential Hotel Preservation Fund Account an amount equal to 40 percent of the cost of construction of one unit comparable to the units to be demolished at 621 Clay Street, plus a pro rate share of site costs, with a written request that the payment be used for rehabilitation or construction of residential units in Chinatown or North

Beach./5D/ Pending completion of the proposed replacement units at Ninth Avenue and Clement Street, the project sponsor would post an irrevocable letter of credit in the amount of the construction cost of the units, estimated to be $480,000. The letter of credit may be drawn upon in the event that development of the proposed replacement units does not take place. The proceeds of the letter of credit would then be used to provide the replacement units which the project sponsor has committed to construct.

Secondary employment attributable to the project would increase housing demand in the Bay Area, but the distribution and magnitude of this secondary demand cannot be estimated reliably. It is not possible to estimate the effects on San Francisco housing prices resulting from housing demand created by the proposed project, as housing demand and costs are also affected by regional growth in housing stock, employment, and population, and by national economic trends.

• Housing Affordability

To determine the affordability of housing in San Francisco for project employees, two major factors must be known: the household income of project employees and the price of housing. Although certain information is available from the 1980 U.S. Census, all of the data have not yet been published. Without such specific information, a variety of sources have been reviewed to project housing affordability.

• Income

A survey of downtown office workers by the San Francisco Planning and Urban Renewal Association (SPUR) in 1974 included information on salary ranges; it estimated an average annual income level of $16,300./6/ Given that the weekly earnings of nonsupervisory finance, insurance and real estate sector workers increased about 67 percent nationwide between 1974 and December 1981, inflating the $16,300 figure yields an average salary of about $27,300 for downtown office workers./7/ Although the SPUR data have been inflated to 1982 levels, there is no way to verify that the distrubution of job classifications has remained the same since 1974, or whether salary levels have, kept pace with, or exceeded the rise in the nationwide Bureau of Labor Statistics index.

More recent published information on office workers in the Bay Area indicates that the 1980 annual salary for support and clerical personnel ranged from about $8,000 to $29,000./8/ Wage information is not available for most professional occupational categories, with the exception of computer system analysts and drafters, which have mean annual salaries of $25,740 and $20,000, respectively;/8/ there are no known published data on income levels specifically for workers in San Francisco since the SPUR study. An October 1981 survey of 60 percent of the tenants at 601 Montgomery St. revealed that about 34 percent of the office workers were professionals with salaries ranging from $21,000 to $300,000 (average $90,000); 36 percent were middle management personnel with salaries ranging from $12,000 to $70,000 (average $45,000), and 30 percent were secretarial/support workers with salaries ranging from $10,000 to $35,000 (average $19,200)./9/ Tenants of the 601 Montgomery St. building are primarily law, insurance, and professional service firms which have a larger proportion of management and professional staff than clerical staff, thus contributing to the relatively high average salary ($52,600) of this building's employees.

Without knowing the office tenants that would occupy the Bank of Canton project, it is impossible to state with certainty the salaries of project employees. From the above information, annual salaries could range from about $8,000 to $300,000 and would probably average between $25,000 and $30,000.

Bank of Canton employees who now work at the site and would be expected to work at the site after project completion had the following salary distribution in 1981: 75 percent have annual salaries of less than $20,000; eight percent between $20,000 and $25,000; eight percent between $25,000 and $30,000, and nine percent, more than $30,000./9A/

Housing Supply

According to the 1980 Census of Housing, owner-occupied housing constitutes about one third of San Francisco's housing stock. The median value of this type of housing was $103,900 in 1980 and the vacancy rate was 1.7 percent./11/ October 1981 data from the San Francisco board of Realtors show that the average selling price of a house in San Francisco was $151,200 in 1981, and that prices ranged from $95,000 to $236,750 for homes sold in the week of October 1, 1981./12/

The 1980 Census data for rental housing shows that the median rent was $266 in San Francisco and the vacancy rate was 4.1 percent./11/ Inflating the median rent from April 1980, the date of the Census, through October 1981 would yield a median rent of $307 based on a 15 percent increase in the Consumer Price Index during that time. According to a rent survey by the Department of City Planning in 1980, median rents in the City ranged from $289 for a studio apartment to $588 for a unit with three or more bedrooms, and averaged $455 for all types of units. However, these data do not represent the rental stock; they (the median monthly rents) were derived from a small sample of vacant units which were advertised for rent in the San Francisco Examiner/Chronicle./12/ Since the Census data are derived from a more extensive sample, this information may reveal a more accurate representation of rental costs than selected newspaper advertisements. Because the median was $266, the range of rental prices would be both higher and lower than this figure. While the census data reflect the entire rental stock, including residential hotels which have generally lower rents than other types of rental dwellings, not all types of units would be available to new households. Stable households in the City may have occupied the same unit for many years. Lower-priced units probably are rented quickly and may not appear in newspaper advertisements.

Affordability

From the information available, it is impossible to determine with certainty the income distribution of project office workers. Specific tenants for the building are not known. The survey information on income distributions contained in the 1974 SPUR study is about eight years old. The October 1981 survey of 601 Montgomery St. tenants may not be representative of tenants of the project. Assuming a median income in the $25,000 to $30,000 range for project workers, it is important to bear in mind that half would earn more and half less than this median, with the spread of this income range not known.

Based on the available data, assumptions must be made to reach conclusions regarding housing affordability. Appendix C, Table C-3, page 279a, illustrates the housing affordable to individuals and households with a wide range of incomes, assuming 30 percent of gross household income is spent for housing. Assuming a 20 percent down payment, 30-year mortgage, and a 16 percent interest rate, Table C-3 illustrates that about two-thirds of project employees could not afford to own housing in San Francisco, although (depending on the number of workers per household) about one-third would be able to do so. Based on the stated assumptions, most project employees, except the lowest-paid clerical workers desiring to live alone, would be able to afford rental housing in San Francisco. These conclusions should be qualified because household income and price of housing, but also by equity in existing real estate, savings, debt, access to credit, interest rates, number of dependents, number of wage earners, tastes and preferences.

FISCAL FACTORS

Revenues to the City

The project would have a fair market value of about $36 million (in 1981 dollars)./13/ Based on an estimated $9 million assessed value, the property would generate about $360,000 annually at the $4 non-bond property tax rate.

The building would generate property tax revenues to retire bond debts. The tax rate at which these revenues would be generated in 1984 would depend on the amount of principal and interest payments due in that year and the total assessed value of property in San Francisco. The rate in 1981 is $0.92 per hundred dollars of assessed value. If that were the 1984 rate, when the building would be occupied, annual revenues from the building would be about

$83,000. The total property tax revenues of $443,000 would be distributed as shown in Table 6, assuming the same distribution as in the 1980-81 fiscal year.

TABLE 6: DISTRIBUTION OF PROPERTY TAX REVENUES FROM PROJECT SITE IN 1985 (1981 dollars)

Agency	1980-81 Tax Rate (Dollars per $100 of Assessed Value)	Percent of Total	Revenues
City and County of S.F.	$4.162	84.60	$374,600
S.F. Unified School District and S.F. Community College District	0.401	8.15	36,100
Bay Area Air Quality Management District	0.008	0.17	750
Bay Area Rapid Transit District	0.348	7.08	31,350
TOTAL	$ 4.92	100.00	$442,800

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* Based on assessed valuation of $9 million

SOURCE: San Francisco Tax Collector's Office and Environmental Science Associates, Inc.

Payroll tax is paid on the earnings of about 95 existing employees at the project site. Based on 1981 average annual Downtown employee earnings of $25,000 and a tax rate of 1.1 percent of total earnings, payroll tax revenues currently total about $26,000./14/ Payroll taxes would be paid on earnings of approximately 730 of the 880 employees in the project. The remainder would be exempt from this tax because they would work for banks or insurance companies, or small businesses with tax liabilities of less than $500, or are owners of businesses. On the assumption of 1981 average annual Downtown employee earnings of $25,000 and a payroll tax rate of 1.1 percent, the project would generate approximately $201,000 in payroll tax revenues when fully occupied./14/

The average Downtown office worker in San Francisco makes taxable expenditures in San Francisco of about $1,200 a year, in 1981 dollars./15/ At a rate of one percent of taxable sales, sales tax revenue to the City generated by existing uses on the project site is about $2,000 annually. Estimated sales tax revenues to the City from the project would be about $10,600 annually, an increase of about $8,600. Sales tax revenues generated by the 0.5 percent BART sales tax are currently about $1,000 a year. Of that amount, BART receives $755 directly, and the remaining $245 is distributed by the Metropolitan Transportation Commission among BART, Muni, and AC Transit. Estimated revenues from the BART sales tax generated by project would be about $5,300, an increase of about $4,300. Of this total, BART would receive $4,000 directly, and the remaining $1,300 would be distributed by the Metropolitan Transportation Commission among BART, Muni and AC Transit.

A gross receipts tax is paid on rental income from buildings on the site. The total annual rental income is about $123,000. At a tax rate of 0.22 percent, revenues from the existing buildings are about $270. Based on estimated total annual receipts from rents of about $5 million in 1981 dollars /16/, tax revenues from the project (assuming full occupancy) would be about $11,000 annually, an increase of about $10,700. The utility users' tax revenues now paid by the occupants of the site on water, gas, electricity and telephone charges are about $5,500. Utility tax revenues generated by the project would be about $20,400, an increase of about $14,900./17/

General Fund revenues from the existing uses on the site totalled about $71,300 in 1981. Annual General Fund revenues to the City and County of San Francisco from the project would total about $603,000, an increase of about $531,700.

These revenue estimates are based on the tax rates and fees in effect in mid-1981. Estimates of receipts from the payroll tax and gross receipts tax would increase by about 36 percent if the Mayor's Revenue Package, approved by the voters in June 1980, is fully implemented. The payroll tax would increase from 1.1 percent to 1.5 percent of total earnings and the gross receipts tax would be increased to $5.00 per $1,000 of revenues. The Revenue Package was approved by a majority (ranging from 51 to 73 percent for the five measures on the ballot) of voters. The validity of these measures is now being challenged in the courts. (The challenge is based on the argument that the Proposition 13 requirement of a two-thirds majority vote applies to the Revenue package.)

COSTS TO THE CITY

Police, Fire, and General Government

- It is difficult to generalize about how costs for given levels of services would differ between project costs and those of existing uses on the site. Most evidence seems to indicate that overall costs per unit of service provided (per square foot or per employee) to the new building would be lower than for the existing buildings. (This conclusion is based on review of several fiscal analyses of Downtown San Francisco. See Cumulative Fiscal Analysis, page 94.) Total costs to serve the site would increase if the project were developed, compared to total costs to serve the site at present, even if costs per unit of service were lower.

San Francisco Municipal Railway (Muni)

The City's General Fund provides a subsidy to the Muni operating budget which covers the difference between Muni's costs and the revenue Muni receives from fares and from federal and state government. This subsidy represents the cost of Muni to the City. The Muni deficit to the City in 1981-82 is estimated at about $0.39 per ride./18/ It is estimated that about 29 percent of the existing workers at the project ride Muni, resulting in a General Fund subsidy to Muni of approximately $9,000. On the assumption that the 1984 subsidy rate would be the same as 1981 and that 29 percent of the new workers would ride Muni, the project would require a General Fund subsidy to Muni of $46,600 a year./19/ (A Muni fare increase from 50 to 60 cents was approved by the Board of Supervisors in February 1982, effective April 1, 1982. Effects of this increase on Muni finances cannot be reliably calculated at this time.)

The subsidy would probably increase by 1985, the first year of full project occupancy, as costs (fuel, labor, etc.) would probably rise faster than revenues from sources other than the General Fund (fares and and non-General-Fund subsidies). In addition, the subsidy may be understated because it includes only those workers who use Muni as their primary mode of transportation and excludes those who use a combination of transportation modes (such as Muni and BART), and because it does not include San Francisco's contributions to state and federal revenues that contribute to Muni subsidies.

The project would help pay for the Muni deficit through its revenue contributions to the General Fund. In the 1980-81 budget, 10 percent of discretionary General Fund revenues were allocated to Muni. If this percentage were to remain constant, the project would generate about $60,300 (of the approximately $512,000 net increase in General Fund revenues from the project) to Muni in 1985.

The San Francisco Board of Supervisors approved an ordinance on April 27, 1981, to assess new Downtown commercial development to support Muni. The plan calls for levying a one-time fee of up to $5.00 per gross square foot on new Downtown office space and creating a Downtown assessment district to collect a yearly fee./20/ The plan has been challenged legally; if it were to go into effect as proposed, the project could generate about $1,150,000 for the one-time fee. If it were struck down, it is likely that another type of transit tax would be enacted to provide funds for transit development, fares would be further increased or restructuring of the regional transit system would occur.

BART

About 15 percent of the existing employees on the project site ride BART to work. Based on the 1981 deficit of $1.50 per passenger, the estimated annual cost to BART that is not covered by riders' fares is $18,000./21,22/ BART's share of sales tax generated by existing employees and of property tax revenue from the site totals about $4,000. BART's net deficit attributable to the site is estimated to be about $14,000. On the assumption of the same 1981 deficit per rider in 1985 and that 15 percent of project employees would ride BART, the project would generate a deficit of about $92,700 annually./23/ This deficit would be partly offset by the $35,400 BART share of the new sales and property tax revenues generated. The net deficit would be about $57,400.

Cumulative Fiscal Aspects

Since 1979, five studies have been prepared that have analyzed fiscal effects of development in the City's C-3-0 (Downtown Office) district. The five studies were prepared by: Recht, Hausrath and Associates (for the 101 Montgomery Street, Final EIR); Sedway/Cooke (for the San Francisco Department of City Planning); Gruen Gruen & Associates (GG&A) and Arthur Andersen and Company (both for the San Francisco Chamber of Commerce); and David Jones (for San Franciscans for Reasonable Growth); and are compared and discussed in the 101 Montgomery Street, Final EIR, EE 80.26, 1981, pages 189-199. This document is available for public review at the Department of City Planning, Office of Environmental Review, 45 Hyde Street, and is hereby incorporated by reference into this EIR. These studies differ in various ways: in the questions they ask, the data sources they use, the methodologies they employ, and the conclusions they draw. Table 7, page 95, compares the purpose, study methodology, and conclusions of the five studies.

As Table 7 shows, the five studies address two separate questions. The Arthur Andersen and David Jones studies examine the fiscal impact of the existing Downtown. Though they use the same data base, their conclusions differ because they use different methodologies, and ask different fiscal questions.

The other three studies address the question of what would be the fiscal impact of new development. The conclusions differ because both different data bases and methodologies are used.

The project would probably have an initially positive fiscal benefit. Because revenues would increase at a slower rate than costs, due to Proposition 13 limitations on property tax increases, eventually costs of providing services to new development would be higher than revenues provided (assuming no new revenue sources were found and the rate of new development declines).

NOTES - Employment, Housing, and Fiscal Factors

/1/ Roslyn Koo, Office Manager, MBT Associates, telephone conversation, November 20, 1981.

TABLE 7 : SUMMARY OF RECENT STUDIES ON FISCAL IMPACT OF DOWNTOWN DEVELOPMENT

STUDY, AUTHOR, DATE	PURPOSE OF STUDY	DATA SOURCES	STUDY METHODOLOGY	CONCLUSIONS
"Fiscal Concerns" in Downtown San Francisco Conservation and Development Planning Program, Phase I Study, Sedway/Cooke, et al., October 1979, pp. 56-59.	To qualitatively assess the likely fiscal impact of new development in the C-3 area under existing zoning ordinances and under Proposition 0.	SPUR Study (1975)	SPUR cost/revenue estimates for downtown in 1973 and for projected growth 1974-1990 were assumed. Proposition 13's effect on revenues and the possible need for increased transportation infrastructure were considered. Generalized conclusions about fiscal impact of new development were drawn.	1) After Proposition 13, "costs may exceed revenues in the downtown by as much as 25%." 2) "[N]ew downtown development will not solve the city's growing fiscal problem; without new revenue sources, development will make it worse in the long run."
Downtown Highrise District Cost Revenue Study, Arthur Andersen & Co., November 1980	To quantify for 1976-77 and 1978-79 how much revenue the C-3-0 area generated and how much it cost to provide city services to the area.	Data compiled from city records and through conversations with city officials.	The study counted only revenues generated within the C-3-0 and costs of providing services to the C-3-0. "The principle guiding the study methodology was to calculate the amount of revenue that San Francisco would lose and the costs that could be reduced if the Downtown Highrise District were a separate city."	The C-3-0 generated $56.79 million in 1976-77, or 61% more than the cost of city services to the area. In 1978-79, revenues were $53.29 million, or 48% greater than costs.
"Fiscal Considerations" Appendix C, 101 Montgomery Street DEIR, Recht Hausrath & Associates, January 1981.	To draw generalized conclusions about "how new development downtown in a post-Proposition 13 environment is likely to change the City's fiscal health from what it would be without new development."	SPUR Study, city records and conversations with city officials.	Conclusions were drawn about how revenues differ between existing and new buildings, and how costs differ between existing and new buildings. Then, under alternative assumptions about the cost/revenue balance in existing buildings and in new buildings, the fiscal impact over time of new development was compared to that of no new development.	"[A]n on-going process of new development would improve the City's fiscal situation. This beneficial impact would cease if new development were halted. This conclusion is tentative due to uncertainties about increased Muni costs."
Downtown Highrise District Cost/Revenue Study, David Jones, February 1981.	To quantify for 1978-79 the revenues generated by businesses in the C-3-0 and the service costs imposed on the city and BART by the C-3-0.	Arthur Andersen study.	The Jones study differs from the Andersen study primarily as follows: 1) Costs of BART (but not revenues to BART) are included; 2) Only revenues paid by businesses and building owners are considered; 3) Muni deficit is computed differently; 4) Most costs are estimated as a percentage of revenues rather than on the basis of actual service demand in the C-3-0.	The C-3-0 imposed costs of $94.4 million on San Francisco and BART, or 125% more than the revenues the area's businesses and building owners generated to San Francisco.
Fiscal Impacts of New Downtown High-Rises on the City and County of San Francisco, Gruen Gruen + Associates, March 1981.	To quantitatively estimate city revenues from the C-3-0 and costs of servicing the C-3-0 in 1998, assuming the addition of 30 million square feet of building space in the C-3-0 between 1981 and 1998.	Arthur Andersen study; data compiled from city records and through conversations with city officials.	"Only direct effects are considered." Costs are only measured for services "provided within the physical limits of the C-3-0 district" and revenues are limited to "taxes on buildings within the district and the activities that take place within those buildings." Assumes the Arthur Andersen study is accurate and builds upon it.	In 1980, revenues from the 39 million square feet of building space in the C-3-0 were 1.66 times as large as costs. In 1998, after completion of the 30 million square feet of new space, revenues from the entire 69 million square feet of C-3-0 building space would increase to 1.92 times as large as costs.

SOURCE: Recht, Hausrath and Associates

Wing Ho Lau, owner, Wing's Cafe, telephone conversation, November 20, 1981.

David Wong, AMROC International, telephone conversation, November 20, 1981.

Nicholas Forell, President, Forell/Elsesser Engineers, Inc., telephone conversation, November 20, 1981.

Jackson Hu, President, Jackson Hu Associated Agencies, letter, December 9, 1981.

/2/ An employment multiplier of 1.18 and a construction multiplier of 1.55 were derived from the Bay Area Input-Output Model from Cooperative Extension Service, University of California, Berkeley, San Francisco Bay Area Input-Output Model 1967-1974.

/3/ ABAG and California Employment Development Department (EDD) data indicate that about 60 percent of the growth in San Francisco employment between 1972 and 1978 was office employment. ABAG projects that employment in San Francisco will increase 41,400 between 1980 and 1985, or an average of 8,300 per year. Sixty percent of that, or 5,000 jobs, are expected to be in offices. Assuming 250 gross square feet of office space per employee, office employment growth would require an additional 1.25 million square feet of office space each year. (Association of Bay Area Governments and Bay Area Council, San Francisco Bay Area Economic Profile, December 1979, pages 40, 43; California Employment Development Department, Wage and Salary Employment, By Industry, San Francisco City and County, 1972-1978).

/4/ San Francisco Examiner, "Effects of S.F. Office Space Squeeze", January 18, 1981, report on a real estate conference sponsored by Coldwell Banker.

/5/ According to the Department of City Planning's housing demand formula ("Housing Requirement for Office Development in San Francisco," July 1981), the project would generate:

$$\frac{230{,}440\text{ GSF}}{250} \times 0.22 = 205\text{ housing units}$$

If the existing office square footage on the site plus the difference between the space the Bank of Canton currently occupies and the space it would occupy in the project is subtracted from the total square footage, the project would generate a demand for:

$$\frac{230{,}440\text{ GSF}-54{,}000\text{ GSF}}{250} \times 0.22 = 155\text{ housing units}$$

The 0.22 factor is based on the projection of 40 percent of new downtown employees living in San Francisco, and 1.8 workers per household.

- /5A/ Robert Levy, superintendent, Bureau of Building Inspection, letter to Mrs. Wei-Cheng Wang, Bank of Canton of California, February 9, 1982.

- /5B/ Robert Levy, Superintendent, Bureau of Building Inspection, letter to Edwin Lee, attorney, Asian Law Caucus, June 7, 1982.

- /5C/ Danny Lee, Vice President, Bank of Canton of California Building Corporation, memorandum, May 14, 1982.

- /5D/ Gordon J. Lau, attorney, letter, May 18, 1982.

- /6/ San Francisco Planning and Urban Renewal Association (SPUR), Impact of Intensive High Rise Development in San Francisco, Detailed Findings, June, 1975.

- /7/ Data are inflated by about 67 percent, the national average percentage increase in weekly earnings of nonsupervisory finance, insurance and real estate employees between 1974 and December 1981 (U.S. Bureau of Labor Statistics, Monthly Labor Review, June 1975 and February 1982).

- /8/ U.S. Department of Labor Statistics, 'Area Wage Survey for the San Francisco-Oakland, CA, Metropolitan Area,' March, 1981.

● /9/ Montgomery-Washington Building Final EIR, 81.104E, certified January 28, 1982, page 75.

● /10/ Danny Lee, Vice President, Bank of Canton of California Building Corporation, telephone conversation, March 10, 1982.

● /11/ Association of Bay Area Governments (ABAG), 'Census Data Bulleting No. 6,' March 1982.

● /12/ San Francisco Department of City Planning, Rent Survey, 1980.

/13/ Bank of Canton of California, August 7, 1981, *Information for Environmental Assessment of the Proposed Bank of Canton of California Building*

/14/ Downtown office workers earn about $25,000 annually in 1981, based on (inflated from) average annual earnings of $16,300 for downtown office workers in 1974, in San Francisco Planning and Urban Renewal Association (SPUR), June 1975, *Impact of Intensive High Rise Development in San Francisco,* Detailed Findings. Data are inflated by about 51 percent, the national average percentage increase in weekly earnings of finance, insurance and real estate employees between 1974 and the end of 1980 (U.S. Bureau of Labor Statistics, *Monthly Labor Review,* January 1981).

/15/ Taxable expenditures within the Downtown business district per officeworker are based on $715 per year in 1974 (SPUR, op. cit., page 262). Between 1974 and 1979, average weekly earnings of finance, insurance, real estate and service workers rose nationally 43 percent. Between 1979 and 1981, a total increase of eight percent is assumed.

/16/ Bank of Canton of California, August 7, 1981, *Information For Environmental Assessment of the Proposed Bank of Canton of California Building.*

/17/ Revenues from existing uses on the project site were calculated as follows:

Water: 133,700 cubic feet of water consumed per year x $0.00414 per cubic foot x 5 percent tax = $30.

Gas: 13,600 therms per year x $0.46 per therm x 5 percent tax = $310 per year.

Electricity: 822,800 kwh per year x $0.045 per kwh. x 5 percent tax = $1,850 per year

Telephone: 46,980 net square feet x $1.40 per square foot per year x 5 percent tax = $3,300 per year

TOTAL: $5,500 per year

Revenues from the project were calculated as follows, using 1981 utility rates:

Water: 703,930 cubic feet per year x $0.00414 per cubic foot x 5 percent tax = $145 per year.

Gas: 17,549 therms per year x $0.46 per therm x 5 percent tax = $405 per year.

Electricity: 2.9 million kwh per year x $0.045 per kwh x 5 percent tax = $6,525 per year.

Telephone: 189,758 net square feet x $1.40 per square foot per year x 5 percent tax = $13,300 per year.

TOTAL: $20,400 per year

/18/ Bruce Bernhard, Muni Chief Accountant, telephone communication, October 28, 1981. Based on 1981-82 Muni net operating cost of $142,139,000, and net revenues of $87,833,000. On the assumption of the 1979 revenue passenger number of 139 million would be applicable in 1981, the average General Fund deficit per ride would be $0.39. However, there has not been any update of the ridership number since 1979; therefore, the deficit per ride of $0.39 is estimated.

/19/ On the assumption of 260 work days per year, two rides per day and absenteeism of 10 percent (holidays, vacations, sick days), each worker would ride an estimated 468 times per year. Therefore, the cost for existing uses is:

> 171 workers x 29 percent ride Muni x 468 rides per year x $0.39 deficit per ride = $9,050.
>
> The cost for the project would be:
> 880 workers x 29 percent ride Muni x 468 rides per year x $0.39 deficit per ride = $46,600.

/20/ Ordinance No. 224-81.

/21/ W. Belding, Senior Economic Analyst, Bay Area Rapid Transit District, telephone conversation, August 10, 1981.

/22/ 171 workers x 15 percent ride BART x 468 rides/year x $1.50 per ride deficit = $18,000. (See also Note 15.)

/23/ 880 workers x 15 percent ride BART x 468 rides/year x $1.50 per ride deficit = $92,700. (See also Note 15.)

E. COMMUNITY SERVICES

POLICE PROTECTION

The project site is located in Statistical Reporting Area (Plot) 342 of the Police Department's Central District. The Central District Station is located at 766 Vallejo Street. From January to June 1981, 288 incidents were reported in the Reporting Area. The total number of reported incidents for Plot 342 was below the average for other Central District plots. Burglaries and auto-related crimes are the predominant crimes reported in the area./1/ The area is patrolled by one 24-hour a day radio patrol car./2/

The San Francisco Police Department indicates that it would not require additional personnel to serve the proposed project. The project could result in an increase in burglary, theft and assault due to the increase in population and property on the site. Any resulting increase in reported crimes could be handled by existing personnel. Additional personnel and equipment would be requested if the Station Captain were to determine that cumulative development would result in an increase in crime in the south of area./2/

DOWNTOWN FIRE PROTECTION SERVICES

San Francisco is experiencing accelerated development in the downtown area. Proposed and approved cumulative development, consisting mostly of high-rise commercial office structures, would add about 8.9 million square feet of gross floor area to the downtown area (including the proposed project). It can be anticipated that the number of fire incidents would increase with the number of people occupying the district.

As the new high-rise buildings must comply with the Life Safety provisions of the San Francisco Building Code, most fires in these buildings can be expected to yield to minimum response by the Fire Department. Since all of these buildings will be of Type 1 construction, the chance of fire that spreads from building to building is relatively small. Type 1 buildings have structural elements made of reinforced concrete, reinforced grouted masonry, reinforced hollow concrete masonry or steel; and exterior walls, roofs, floors and some inner walls of "fire-resistive incombustible construction" (San Francisco Building Code Section 1801). For example, when the old and highly combustible Produce Market was replaced by the high-rise buildings of the Golden Gateway Redevelopment Project, Fire Department response needs for the area decreased.

On the average, replacing older, more vulnerable, low occupancy structures with higher quality, greater occupancy high-rise buildings probably has no measurable effect on the need for fire protection./3/

WATER SERVICE

Water consumption at the project would be about 23,000 gallons per day (gpd). Water would be provided by the 12-inch diameter water main located under Clay Street. The San Francisco Water Department anticipates no problem with serving the water needs of cumulative Downtown development, including this project, as the current system has the capacity to accommodate the increasing level of water consumption./4/

WASTEWATER SERVICE

The Bureau of Sanitary Engineering of the San Francisco Department of Public Works operates a combined stormwater and sanitary sewer system. Stormwater runoff and sewage from the site area flow to the North Point Water Pollution Control Plant, which has a dry-weather primary treatment capacity of 66 million gallons per day (MGD); current average dry-weather flows to the plant are 50 MGD. City treatment plants are designed to handle storm flows from rainfall of up to 0.02 inches per hour; excess flows bypass the plants and discharge directly into the Bay./5/

No problem is anticipated in accommodating the wastewater generated by cumulative Downtown development, including this project./6/ The City is in the process of increasing the capacity of its wastewater collection and treatment system to handle projected citywide increases in wastewater generation.

The San Francisco Wastewater Management Plan was designed to upgrade wastewater treatment and bring the City sewer system into compliance with Regional Water Quality Control Board requirements./7/ Dry-weather facilities for secondary treatment are scheduled for completion in September 1982. Upon facility completion, dry-weather flows from the area would be treated at the Southeast Water Pollution Control Plant, which would then have a peak treatment capacity of 140 MGD and would treat average flows of 85 MGD./5/ According to the original plans, the North Point Plant would treat wet-weather flows until completion of the citywide wet-weather system in the late 1980's. At that time the North Point Plant would probably be closed. Continued state and federal funding is uncertain; it is not known how much of the remaining facilities to complete implementation of the Wastewater Master Plan will be built.

The project would generate approximately 23,000 gpd of dry-weather wastewater. Sufficient capacity exists in the three-by-five-foot combined sewer and storm drain on Montgomery, Clay and Commercial Streets, to accommodate the proposed project./8/ Wastewater flows would be treated at the Southeast Water Pollution Control Plant and would represent less than 0.02 percent of plant capacity.

● SOLID WASTE SERVICE

The Golden Gate Disposal Company collects solid waste from the project site and vicinity, under contract to the City of San Francisco. Wastes are taken to a transfer station north of Brisbane and then transported to a landfill site at Mountain View Shoreline Regional Park. The landfill contract with the City of Mountain View expires in 1983. The State Solid Waste Management Board recently approved (May 7, 1982) a proposal for disposal of San Francisco solid wastes at the Altamont landfill site near Livermore, in Alameda County, for five years. If approved by the Mayor and Board of Supervisors of San Francisco, disposal at this site would commence in October 1983, when the present contract with the City of Mountain View expires. The City is also pursuing, as a long-term solution, development of a Resource Recovery Facility (trash burner). The center would burn solid waste in a boiler to produce steam to generate electricity and reduce trash volume. The center would not be needed as a direct result of this project or cumulative development in the Downtown. The proposed resource recovery facility would be responsible for reducing the volume of solid waste targeted for land disposal. Solid waste volumes are expected to decrease over present volumes due to intensified recycling efforts throughout the City. The City of Brisbane (the location of the facility) has prepared an EIR on this facility (June 1980). A subsequent EIR is being prepared to cover proposed modifications.

The project would generate approximately 1.8 tons of solid waste per day. Trash compacting facilities would be provided in the proposed project. The Golden Gate Disposal Company anticipates no problems with providing collection and disposal services to the site./9/

NOTES - Community Services

/1/ San Francisco Police Department, Incidents for Which a Police Report Was Made, by District, Plot and Crime, January - June 1981.

/2/ Paul Libert, Sergeant, Planning and Research Division, San Francisco Police Department, telephone conversation, September 3, 1981

/3/ Information contained in this section is from Bendix Environmental Research, Inc., Environmental Consultants and Fire Protection Engineers, confirmed by Emmet D. Condon, Deputy Chief, San Francisco Fire Department, September 24, 1981.

/4/ Harlow Swain, Senior District Engineer, San Francisco Water Department, telephone conversation, September 3, 1981.

/5/ Don Hayashi, Director of Citizen Participation, San Francisco Clean Water Program, telephone conversation, October 2, 1981.

/6/ Greg Moore, Bureau of Sanitary Engineering, telephone conversation, October 5, 1981.

/7/ San Francisco Wastewater Management Program: Overview; January 1977, pages 1-2.

/8/ Nathan Lee, Engineering Associate II, San Francisco Clean Water Program, telephone conversation, September 3, 1981.

/9/ Fiore Garbarino, Treasurer, Golden Gate Disposal Co., telephone conversation, September 3, 1981.

F. TRANSPORTATION, CIRCULATION AND PARKING

DEMOLITION, EXCAVATION, AND CONSTRUCTION

During the estimated 27-month construction period, transportation impacts would result from truck movements to and from the site during demolition, excavation, and construction and from construction workers travelling to and from the site. Demolition would require three months and would generate an average of 18 truck movements a day, an average of three truck movements per hour in or out of the project site between 9 a.m. and noon, and between 1 p.m. and 4 p.m./1/ Excavation is expected to require three months and would generate an average of 48 truck movements per day (an average of eight truck movements per hour in or out of the project site). Trucks are expected to follow haul routes via Montgomery and Clay Streets to the Embarcadero and James Lick Freeways, to Peninsula disposal sites. Post-excavation construction would require 21 months, and would generate an average of eight truck movements per day for delivery of construction materials.

A temporary increased parking demand for construction worker vehicles, and localized intersection impacts from construction worker traffic, would occur in proportion to the number of workers on-site, and their mode of transportation.

Construction truck traffic would slightly lessen capacities of access streets and haul routes due to the relatively slow movements and large turning radii of the trucks. Any truck traffic from 7 a.m. to 9 a.m. or from 4 p.m. to 6 p.m. would conflict with peak-hour traffic, particularly at freeway access points. Site access would be via Montgomery Street. Materials storage would be provided on-site. Clay and Montgomery Streets would have sidewalks closed along the site frontage for the 27-month construction period. The parking lane on Clay Street and loading zone on Montgomery Street could be closed to allow pedestrian travel, removing four metered parking spaces on Clay Street. These spaces are a tow-away zone from 7 a.m. to 9 a.m. and from 4 p.m. to 6 p.m. If the curb lane on Montgomery Street between Clay and Commercial Streets and the right-turn lane on Clay Street were unavailable during the construction period, the peak-hour level of service at the Clay and Montgomery intersection would worsen during that period, from a volume-capacity ratio of 0.72 (Level of Service C) to a ratio of 0.90 (Level of Service D/E)

● The approved Montgomery-Washington building, one block north on Montgomery Street, may be under construction at the same time as the project. Concurrent construction activities at both sites could disrupt traffic and pedestrian flows by multiple lane closures, transit stop relocation, sidewalk detours and street excavation. The table below shows the cumulative construction effects on two intersections near the site. Temporary rerouting of sidewalk traffic on Montgomery Street would require an existing bus stop at the Commercial Street corner to be moved or temporarily removed from service. If the sidewalks are relocated into the curbside travel lanes, the pedestrian levels of operation on the sidewalks would not be substantially different than the existing conditions, depending upon the width of walkway provided. Concentrations of truck traffic serving the two sites could have an aggregate effect upon traffic operation, but would probably not worsen the level of service. Truck traffic would generally be limited to non-peak hours.

● TABLE 7A: PROJECT EFFECTS ON INTERSECTION LEVELS OF SERVICE DURING CONSTRUCTION

Condition	Montgomery & Washington		Montgomery & Clay	
Existing	0.81	D	0.72	C
Bank of Canton construction	0.81	D	0.90	D/E
plus Montgomery-Washington building construction	0.90	D/E	0.90	D/E

SOURCE: Environmental Science Associates.

TRAVEL DEMAND

Travel from the project was estimated on the basis of the number of net square feet of office space in the project. The peak-hour of project generation was assumed to be the weekday evening peak hour during the period of 4 p.m to 6 p.m, with 20 percent of the daily (24-hour) travel./2/ The peak hour travel distribution is shown in Table 8. The project would generate approximately 2,690 net person-trip-ends per day (1,345 round trips) with approximately 540 trip ends occurring in the peak hour. Total gross trip generation for the site would be 3,120 person trips per day. (The Bank of Canton currently generates 430 trips per day. As the present bank use would remain, the net trip generation would be 2,690 person-trips per day, or 1,345 round trips.)

TABLE 8: ESTIMATED PEAK-HOUR WEEKDAY TRAVEL DEMAND GENERATED BY THE PROJECT*

Origin/ Destination	Percent	Total	Auto	Transit	Walk**
North Bay	11	60	40	20	-
East Bay	24	130	60	70	-
Peninsula	16	85	50	35	-
San Francisco	49	265	100	155	10
TOTAL	100%	540	250	280	10

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* Work and non-work person trip ends.
**Persons who walk to the site without using any other form of transportation, total pedestrian peak-hour trips would be 540.

SOURCE: TJKM, Transportation Consultants; Guidelines for Environmental Impact Review, Transportation Impacts, San Francisco Department of City Planning, October 1980.

The "Walk" column in Table 8 shows only primary walk trips. Most persons traveling to the site by a vehicle or transit would then walk to the project, as parking would not be available at the site.

- The cumulative development from the 30 buildings listed in Table D-6 on page 284 would total approximately 11 million square feet of office space. This amount of office space would generate approximately 39,000 peak hour person-trip-ends. Additionally, the City has identified proposed development that would add further trip generation. Approximately 9 million square feet of additional office space has been proposed (see Table D-6a) for a total cumulative development of about 20 million square feet. If approved, this additional development would add 31,500 further person trip ends to the peak hour for a total of 70,500 new person trip ends in the p.m. peak hour. The project would represent approximately one percent of the total cumulative trip ends.

VEHICULAR IMPACTS

The highest existing traffic volumes during the peak hour are on the streets leading to freeways in the project area. A capacity analysis of the intersections adjoining the project indicates that the intersections of Clay and Kearny Streets, and of Clay and Montgomery Streets, operate at vehicular Level of Service C or better. (See Appendix D, Table D-1, page 280 for definitions and volume/capacity ratios for each vehicular Level of Service, and Table 9, below, for the peak hour volume-to-capacity ratios). The intersection of Washington Street, Columbus Avenue and Montgomery Street operates at Level of Service D during the p.m. peak hour. The two intersections at the freeway ramps (the intersections of Broadway and Sansome Street, and Clay and Front Streets) operate at Level of Service C or better.

TABLE 9: EXISTING AND PROJECTED PEAK-HOUR INTERSECTION VOLUME-TO-CAPACITY RATIOS IN 1984

	Existing		1984 Base**		1984 Base+Project	
Intersection	V/C	LOS**	V/C	LOS**	V/C	LOS**
Montgomery & Washington	0.81	D	0.83	D	0.83	D
Montgomery & Clay	0.72	C	0.74	C	0.74	C
Kearny & Clay	0.78	C	0.79	C	0.79	C
Clay & Front	0.51	A	0.60	A	0.61	B
Sansome & Broadway	0.71	C	0.78	C	0.80	C

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*Cumulative development; see Appendix D, Table D-6, page 284, for projects included.

**Levels of Service; see Appendix D, Table D-1, page 280, for definition.

SOURCE: TJKM, Transportation Consultants

Project-generated traffic volumes based on numbers of on-site employees were used to estimate increases at freeway access points. This assumed (worst-case analysis for vehicular impacts) that as long as parking were available within walking distance, most drivers would continue to drive to work.

Washington, Clay, and Sansome Streets serve the project as feeders to or from freeway ramps, and are points of automobile congestion in the Financial District. Analysis of project-related impacts on these streets was assumed to represent the "worst case", as project traffic would be more concentrated on these freeway feeder streets than on other streets in the project vicinity. Project-related impacts on other streets would be less as project traffic on them would be more dispersed.

Projected 1984 traffic volumes, exclusive of the project, are based on traffic increases from expected cumulative development. (Projects under construction, approved projects not under construction, and projects under review by the City, as of October 1981. See Appendix D, Table D-6, page 284.)

- The amount of vehicular traffic from the additional nine million square feet of office space would be approximately 0.8 times the amount of the traffic from the 30 projects shown in Table D-6 on page 284 of the EIR. Actual impacts would be less than this as the additional buildings would be dispersed over a large area of downtown.

- Table 9 shows project-related traffic effects at intersections on freeway feeder streets. The 1984 base values reflect traffic increases from non-project, cumulative development. As shown in Table 9, the project would not measurably decrease vehicular Level of Service below acceptable (Level of Service C) conditions at the analyzed intersections. At the intersections adjacent to the project block, traffic increases would occur from cumulative development and from project vehicles loading and unloading passengers and goods. As shown in Table 9, the project would not decrease the Level of Service at Sansome Street and Broadway. At Clay and Front Streets, the project would cause a reduction to Level of Service B, a satisfactory condition. Increased traffic on the above streets could cause redistribution of travel patterns to less-traveled routes. The impact of the additional 9 million square feet of office space presented in Table D-6a would be a lessening of the level of service at the intersections shown in Table 9.

PARKING IMPACTS

The new daily parking demand on-site would be 240 parking spaces, 40 short-term, and 200 long-term, based on projected auto trips (excluding existing demand by Bank of Canton uses that would continue on-site). The project would provide no on-site parking spaces; this would create a parking deficit of about 240 spaces on-site./3/

● The expected increase in long-term parking demand due to cumulative development in Downtown by 1984 would be 13,550 spaces per day and the increase in average short-term demand would be 2,125 spaces per hour (assuming a nine-hour day, 8 a.m. to 5 p.m.). The project demand would be 1.5 percent of the cumulative long-term demand increase and 1.9 percent of the cumulative short-term demand increase. Current parking supply in the core area is not sufficient to meet the projected demand. Parking demand from additional office space shown in Table D-6a would be approximately 0.8 times the parking demand from the 30 buildings listed in Table D-6. The project would be approximately one percent of the total cumulative demand.

The *Revisions to the Transportation Element of the Master Plan Regarding Parking* (1977) encourage short-term use of existing parking facilities within and adjacent to the downtown core by converting all-day commuter parking to short-term parking in areas of high demand or to car/van-pool parking where short-term parking demands are low."/4/ Measures to implement this policy, described in the 1977 document, include providing additional short-term parking facilities around but not within the downtown core, with adequate transit or pedestrian access to the core. Any new long-term parking is proposed to be located outside of the Downtown area, and to be concentrated, to conserve land and to make transit service efficient. If this policy were implemented, approximately 13,000 off-street spaces within 2,000 feet of the project site (based upon survey data--see Environmental Setting, Section III., page 57) could be converted to short-term-only parking. The off-street spaces surveyed for the existing conditions are now used for both short- and long-term parking.

The Master Plan parking policy, if implemented, could remove a basis for comparison of the existing supply/demand ratio with future parking demands. A large number of long-term parkers currently using parking facilities in the Downtown core would potentially be displaced.

Demand for long-term parking spaces due to cumulative development and the project would be added to demand created by any long-term parkers displaced by the Master Plan Parking Policy. As a result, some drivers could park at greater distances, for example, west of Mason Street, south of Market Street, or north of Green Street (in areas where meters or preferential parking for residents would not restrict all-day parking), then walk or use Muni to reach the Downtown core. In the years following 1984, as further office expansion occurs, particularly in the Yerba Buena Center Redevelopment Area, this option would probably be foreclosed, because of expanded parking demand, unless a large increase in the parking supply were to occur in the south-of-Market area.

Imbalance in the demand for long-term parking and the potential supply could encourage use of car pools and van pools; the creation of satellite parking facilities in outlying neighborhoods, with shuttle or expanded Muni service to the Downtown area; and/or increased use of transit. Peninsula residents, for example, could find Southern Pacific commuter trains more attractive if they could park no closer to downtown than the terminal at Fourth and Townsend Streets All transit options would add to the use of regional and local transit systems, particularly Muni. (see Transit Impacts, page 110).

TRUCK DELIVERIES AND LOADING

The project would provide two loading bays, which would be in compliance with the Planning Code requirement, and with off-street loading space requirements established by City Planning Resolution No. 9286 of January 21, 1982./5/ Access to the loading/service area would be via a short, straight ramp from Clay Street. The bays could handle standard single-unit trucks and smaller vehicles, and single-unit trucks and delivery vans would be able to negotiate the ramp into the loading area. Semi-trailer trucks would not be able to use the loading bays without blocking one lane of Clay Street. Project loading-space demand would be about 2.2 spaces per hour./6/ The two proposed off-street bays would generally meet this average demand, with some use of the existing curb loading zone striped on Montgomery Street on the project frontage.

Freight elevators would be located in the lobby area of the service level (see Figure 4, page 20). Access to the elevators from the loading docks would be provided via a ramp and a set of doors. There would be direct access to street level uses from the freight elevator through the building lobby.

PEDESTRIAN ACTIVITY

The sidewalks and crosswalks serving the project site support moderate levels of pedestrian activity during the noon hour and the morning and evening peak periods. (Appendix D, Table D-4, page 282, describes pedestrian flow categories). Table 10, page 109, shows 15-minute pedestrian flows and sidewalk levels of operation on the sidewalks surrounding the project site.

In the site vicinity, noon hour flows are more intense than the a.m. or p.m. peak flows. Montgomery Street sidewalk pedestrian flows are impeded during the noon and p.m. peak hours. Clay Street pedestrian flows are impeded during the noon hour and unimpeded in the p.m. peak hour. Pedestrian activity around the site during the peak period of 4 p.m. to 6 p.m. is directed primarily to transit and parking facilities, and pedestrian flows during the p.m. peak are generally more intense than those in the a.m. peak (see Table 10.)

TABLE 10: PEAK 15-MINUTE PEDESTRIAN VOLUMES (PROJECT SIDE OF STREET)

Sidewalk	Sidewalk Width (ft) Actual	Sidewalk Width (ft) Effective*	Volume** NOON	Volume** P.M.	Flow Rate*** NOON	Flow Rate*** P.M.	Pedestrian Flow Regime NOON	Pedestrian Flow Regime P.M.
1981								
Clay	10.0	6.3	240	100	2.6	1.0	Impeded	Unimpeded
Montgomery	11.8	7.4	410	265	3.7	2.4	Impeded	Impeded
1984 Base								
Clay	10.0	6.3	270	130	2.9	1.4	Impeded	Unimpeded
Montgomery	11.8	7.4	500	360	4.5	3.2	Impeded	Impeded
1984 Base + Project								
Clay	10.0	6.3	330	190	3.5	2.0	Impeded	Unimpeded
Montgomery	11.8	7.4	690	550	6.2	4.9	Constrained	Impeded

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*Effective widths take account of poles, planter boxes, people standing at store windows, etc.
**Pedestrians per 15 minutes.
***Pedestrians per minute per foot of effective sidewalk width.

See Appendix D, Table D-4, for definitions and volume criteria.
Based upon manual counts made August 11, 1981 by TJKM.

SOURCE: TJKM, Transportation Consultants

The Clay Street crosswalk at Montgomery Street operates in impeded conditions during the p.m. peak, and the Montgomery Street crosswalk at Clay Street operates in unimpeded conditions during the p.m. peak. Reservoir space (sidewalk space occupied by pedestrians waiting to use the crosswalk) is sufficient to prevent blockage of pedestrian flows on the sidewalks.

The project would increase pedestrian activity on the sidewalks surrounding the site. (See Table 10). The primary pedestrian access to the project would be on Montgomery Street. Cumulative pedestrian travel, including that from the project, would cause neither the Clay Street nor the Montgomery Street p.m. peak hour sidewalk and crosswalk operations to change into the next flow regime. During the noon hour, the project pedestrian travel, when added to the cumulative demand in 1984, would shift the Montgomery Street sidewalk pedestrian flow from impeded conditions into constrained conditions.

TRANSIT IMPACTS

Golden Gate Transit, A-C Transit and Southern Pacific (SPRR) operate during their peak hours at less than 100 percent of their seated capacity. Muni, SamTrans and BART exceed their seated capacities during peak hours but operate at less than 100 percent of total capacity, although specific routes experience peak-of-the-peak loadings in excess of total (seated plus standing) capacity for periods from five to 30 minutes during the peak hour. (See Appendix D, Figure D-8, page 286, for photographs of Muni peak-loading conditions.) In the experience of most agencies, the p.m. peak is more intense than the a.m. peak. (See Appendix D, Table D-5, page 283, for a breakdown of existing transit ridership characteristics.)

Transit impacts are based on cumulative projected San Francisco development (projects under construction, approved projects, and projects under review; see Appendix D, Table D-6). For all systems except the Muni the analysis was conducted at a system level, considering only the lines or blocks of lines that serve the project area. For Muni, a line-by-line analysis was conducted according to Department of City Planning Guidelines, which analyze cumulative and project ridership based on existing capacity. This analysis assumes no expansion in the Muni system and the results are not dependent on increased funding./7/ Any expansion (the Muni 5-year plan) to the system, should it occur, would likely lower load factors. If funding were to decrease, operating conditions on the Muni could be expected to deteriorate. Many riders might switch to other means of transportation to reach the Downtown; however, it is not possible to determine the shift in transportation mode which could occur. If funding were no longer reasonably certain, possible alternatives include an increase in fares, some type of tax or assessment, or a restructuring of the regional transit system.

Increases from proposed downtown development are included in the 1984 base values. In addition, 1984 riders from other developments not specifically analyzed have been accounted for by a growth factor for each transit agency. The expected net ridership from the project was added to this 1984 base ridership thus determined and an analysis of passenger demand as a percent of total capacity was made.

- Although the transit analysis used a growth factor to account for non-specified development, the factor did not fully account for the additional 9 million square feet of office space, as shown in Table D-6a. The growth factor used was equivalent to approximately two percent of the existing volumes on all agencies except A-C Transit where no growth factor was used. Thus, the ridership from the growth factor represents approximately four percent of the ridership from the 30 projects listed in Table D-6. The additional nine million square feet of office space would increase the ridership over the 30 buildings (in Table D-6) by 0.8 (approximately 0.75 times the increment shown in Table 11). The additional office space would increase the load factors shown in Table 11 by approximately 20 percent. The basis for the Muni analysis was supplied by the Department of City Planning and was compiled from a list of active projects in October 1980.

- The land-use approach uses square footage of office space as a basis for estimating peak transportation demand; this approach generally assumes that as new office space is constructed, it would be occupied. The employment-share approach uses a net increase in jobs as a basis for estimating peak demand, and reflects job loss as well as additions to the labor force. Briefly, the fundamental differences between (and limitations of) the two approaches are:

- The land-use approach (as it has been applied in this EIR) assumes no loss of existing space in the downtown area and, consequently, no loss of employment from that area. Thus, all of the travel from the proposed office space has been considered to be an increment to be added to the existing travel currently on the transportation network. The employment-share approach generates a net increase in employment in the downtown that has taken account of loss of employment as industry and offices move out of the City, replacement of one type of industry with another (industry shifts), and replacement of existing office space with new office space.

- The land-use approach assumes that literally all of the currently proposed development in the downtown area (no matter where it is in the environmental review process) will be constructed and fully occupied within the time frame of the (Bank of Canton) project development and occupancy. No allowance has been made for less-than-100% occupancy or for proposed developments that are never constructed. The employment-share approach makes no implicit assumptions concerning occupancy rates or actual square footage of development constructed; rather, it projects an employment share of the region based directly upon extrapolation of past trends.

- In basic terms, the land-use approach identifies all potential development within the downtown (regardless of the likelihood of occurrence) and adds the demands generated by the development to the existing transportation network, assuming that the existing regional distribution of trips will persist. The employment-share approach looks at the existing employment in the downtown, forecasts the incremental change in employment based upon regional considerations and past trends, and assigns the regional distribution of trips, based on such forecasts. Neither of the two approaches has attempted to project future changes in modal split.

- To illustrate the differences in the two approaches, Table 10a shows the total employment projections by the two methods (and the project's share thereof), the regional distributions of trips, and Muni's share of the new transit travel (and the project's share thereof).

- As shown in the table, the employment-share approach generates about 60% fewer employees in the downtown and about 60% fewer riders on the Muni than does the land-use approach. The employment-share approach would thus reduce the transit demand impacts discussed in the second paragraph on page 111 of the

TABLE 10a: COMPARISONS OF LAND-USE AND EMPLOYMENT SHARE APPROACHES FOR LATE 1984 (TIME OF OCCUPANCY OF BANK OF CANTON PROJECT)

Approach	Downtown Employment Increase	Project Share*	Regional Trip Share				Muni Peak-hour Increase	Project Share**
			S.F.	Pen.	E.B.	N.B.		
Land Use	80,500	1.1%	49%	16%	24%	11%	18,300	0.6%
Empl. Share# (maximum)	31,700	2.8%##	50-54%	19%	17-21%	10%	7,300###	1.6%

NOTE: As explained in the text above, comparisons between the entries for the two approaches must be made with the understanding that the land-use approach reflects gross increases in employment and transit demand, while the employment-share approach reflects net increases therein. The differences among the regional trip share figures reflect these and the other differences between the two approaches.

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* Employment generated by the proposed Bank of Canton project, as a percent of the cumulative downtown-employment increase.

** Muni peak-hour trips generated by the proposed Bank of Canton project, as a percent of the cumulative downtown Muni peak-hour increase.

# These figures, representing the worst-case analysis under the employment-share approach, have been adjusted to the year 1984, the expected date of occupancy of the proposed Bank of Canton project, from the OER memorandum's 1990 figures, reviewed and accepted by MTC, ABAG and Muni. The (backward) adjustment is based on a (compounded) 10%-per-year growth in office space. (The OER memorandum forecasts, for 1990, a downtown employment increase of 56,100 and a resulting Muni peak-hour increase of 12,900 trips. Note that the land-use-approach entries assume that an additional 20 million square feet of office space will come on line by the late 1984.

## Implies that the Bank of Canton would be one of an average of about 35 projects, of approximately the same size, coming on line by late 1984.

### Also takes into account reductions in demand due to shift work and absenteeism. Based on 54% regional trip split to San Francisco (worst-case).

EIR. Consequently, the land-use approach can be considered to be a 'worst case' analysis for Muni. Similar conclusions can be drawn for the other transit agencies.

Several considerations concerning both of the methods need to be discussed. The land-use method, as it has been applied in San Francisco EIR's, analyzes impacts for the p.m. peak hour, whereas the employment-share method analyzes the a.m. peak. Several reasons exist as to why one peak (or the other) may be the better one to analyze.

- First, the p.m. peak may be more useful to analyze, in that actual observation shows that the p.m. peak has a greater overall effect on the local street network and transit system in the downtown area than does the a.m. peak, as more travel takes place during the p.m. peak. Also, transit service is more inclined to differ from scheduled times during the p.m. peak than during the a.m. peak, as operational delays have had an 8-to-10-hour period over which to accumulate. Finally, the on-ramps to the freeway/bridge system are greater bottlenecks (in the p.m. peak) than are the off-ramps (in the a.m. peak).

- Conversely,the peaking characteristics of the a.m. peak may be more useful in that they are much sharper than those of the p.m. peak (i.e., a greater percentage of the peak-period travel occurs during a single hour). Also, as a result of the bridge system into San Francisco, travel inbound into the City is much easier to document, as vehicles must pass through the toll booths on the Golden Gate and Bay Bridges. Finally, a greater proportion of the travel occurring during the a.m. peak is employment-related; the p.m. peak includes shopping and pleasure trips.

- The land-use approach, as it has been used in this EIR, examines the p.m. peak because it has been observed to be the worst case for congestion on City streets. The analytical approach does not reflect the spreading of the p.m. peak that is currently occurring, as all of the new trips have been assumed to take place in one single hour.

- One of the major points about the land-use approach is that it has not accurately considered a net change in the amount of office space in the downtown, as all of the proposed development has been added to the existing. With more and more existing office space being replaced by new office space as construction occurs in the downtown, the effect of continually adding new space in the analysis without subtracting lost space is becoming an important factor. The land-use analysis assumes all new office space is fully occupied. The assumption of a functional vacancy rate of 5% is not uncommon (OER Memorandum, July 2, 1982, page 2, available for public review at 450 McAllister St., 5th Floor). With 20 million square feet of new office space assumed in the land-use analysis to be occupied by late 1984, this 5% would amount to approximately 1 million square feet, leading to 4000 employees (at 250 square feet per employee), the Muni share of which would be about 900 riders in the p.m. peak hour. This adjustment alone would reduce Muni peak-hour impacts by about 900 riders in the cumulative analysis stated above.

- The land-use approach calculations have assumed transit capacity to be fixed at existing levels. The OER memorandum points out, 'It should be recognized that transportation is a more 'elastic' resource with many options for expansion including increasing existing capacity by using articulated vehicles, expanded car pool and van pool programs and increasing the peak commuter period through flex-time programs, among others.

As shown in Table 11, the project riders during the p.m. peak hour in 1984 would not increase transit loading by more than 0.3 percent on any non-Muni system. This would not be a statistically significant change./8/ Analysis of the transit data allows a reasonable assumption that for short periods of time (15 to 30 minutes) certain routes now experience loadings nearer to 100 percent of total capacity than those shown in Table 11. The loadings shown are the results of averaging ridership of full vehicles with that of partially empty vehicles, thus equalizing the loads over the one-hour period. As the cumulative demand increases, the length of time of peak loadings will increase, causing a spreading of peak-of-the-peak conditions over time.

Of the 52 Muni lines serving the Downtown San Francisco area, roughly bounded by Brannan Street, 11th Street, Van Ness Avenue, and Clay Street, 37 operate within walking distance (within a radius of 2,000 feet) of the site (see Appendix D, Table D-7, page 285)./9/ With trips to be generated by the projected cumulative development, 26 of these lines would operate during the p.m. peak hour in 1984 beyond maximum recommended capacity (defined by Muni as 150 percent of seated capacity)./10/ Total ridership on these 37 lines would then be about 35,100 during the peak hour. The project would contribute about 115 peak-hour trips to these lines, representing about a 0.33 percent increase.

By 1984, four transit agencies are projected to operate at greater than 90 percent of total peak-hour capacity. The four agencies are BART (transbay), Golden Gate Transit, A-C Transit and SamTrans. As the cumulative demand increases, the length of time of peak loadings would increase, thus forcing a spreading of peak-of-the-peak conditions over time as long as transit capacity is available. As some routes operate only during heavy demand periods (i.e., express service for one to two hours during the peaks), there may not be capacity available to allow this spread without adding runs.

TABLE 11: P.M. PEAK HOUR OUTBOUND TRANSIT CHARACTERISTICS

	1981		1984 Base		1984 Base + Project		
Agency*	Rider-ship	% Occ.	Rider-ship	% Occ.**	Rider-ship	% Occ.**	% Inc.***
Muni	25,200	****	34,966	113	35,079	114	0.3
BART							
Transbay	10,500	120	14,440	110	14,470	110	0.2
Westbay	6,360	99	8,370	87	8,390	87	0.3
A-C Transit	9,130	91	12,500	100	12,530	100	0.2
SamTrans	970	115	1,550	132	1,555	133	0.3
SPRR	4,395	40	6,120	56	6,130	56	0.3
Golden Gate							
Motor Coach	5,050	92	6,775	101	6,790	101	0.2
Ferry	1,070	75	1,585	76	1,590	77	0.2

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* See Appendix D, Table D-5, for definition of system capacities.
** Percent of total seated capacity occupied.
*** Percent increase in projected 1984 ridership due to project.
**** Load factors have not been calculated for Muni as a whole due to lack of reliable data. Line-by-line load factors are presented in Appendix D, Table D-7, page 285.

SOURCE: TJKM, Transportation Consultants

All of the transit systems discussed have developed five-year plans to guide future system growth. Currently, none of the agencies exceeds total capacity for the peak hour. Consequently, until the projected ridership begins to become evident on the transit routes, extensive changes would not be warranted. The transit agencies have made system-wide projections of demand to aid in planning capital costs budgets for service improvements. Not all of the cumulative development analyzed in this report has been incorporated in the agency projections. Consequently, the planned service increases in the next five-year period may not be adequate to meet the projected demand shown in Table 9. Several of the systems are constrained by physical limits (for example, operational capacity in Muni Metro) that would preclude significant service increases from occurring in the next five years.

NOTES - Transportation, Circulation and Parking

/1/ Dinwiddie Construction Company, letter, August 24, 1981.

/2/ Trip generation, purpose, and regional distribution were obtained from Attachment 1 of Guidelines for Environmental Impact Review, Transportation Impacts, San Francisco Department of City Planning, October 1980. Travel mode assignments were made using Attachment 2, and the Muni analysis using Attachment 3, of this document.

/3/ The parking characteristics data are from a federally sponsored research document: National Cooperative Highway Research Program (NCHRP), 1969, Urban Travel Patterns for Hospitals, Universities, Office Buildings, and Capitols, Rept. No. 62. To estimate the work or long-term parking demand, all of the auto driver work trips were assumed to generate demand for one parking space per trip or 200 spaces for the project. The non-work or short-term parking demand was calculated by dividing the non-work auto driver trips by a turnover factor based upon the average length of stay. The turnover factor was calculated by dividing a nine-hour working day by the average length of stay of 1.4 hours, a factor of 6.4. Thus, the average short-term (non-work) parking demand was calculated to be 40 spaces per hour for the project.

/4/ Revision to the Transportation Element of the Master Plan Regarding Parking, Resolution 7647, San Francisco Planning Commission, January 20, 1977, page 3.

/5/ City Planning Code, Article 1.5, Section 152, page 61. The code requires two off-street loading spaces for office buildings containing between 200,001 and 500,000 gross square feet. Resolution No. 9286 (January 21, 1982), would require 0.1 off-street spaces per 10,000 square feet of office and bank uses, to the closest whole number. This would be 2.3 spaces, rounded to two, for the project. Each space would be required to have a minimum length of 35 feet.

/6/ Center City Circulation Program: Pedestrian Circulation and Goods Movement, Working Papers 1, 2, and 3 and Final Report, San Francisco Department of City Planning, 1980.

/7/ Muni analysis is based on Attachment 3, Guidelines for Environmental Impact Review, Transportation Impacts, October 1980.

/8/ The transportation analysis may be considered accurate to within 10 percent. Thus changes of less than 10 percent would not be considered statistically significant.

/9/ The 37 affected Muni lines would be the 1, 1X, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 14GL, 14X, 15, 17X, 21, 27, 30, 30X, 31, 31X, 38, 38L, 38AX, 38BX, 42, 45, 55, 66, 71, 72, 80X, J, K, and N.

/10/ Maximum recommended capacity is determined by each agency and may or may not be the absolute maximum number of riders that can be carried by a transit vehicle (see Appendix D, Table D-5, page 282).

G. AIR QUALITY

CONSTRUCTION PERIOD

Dust emissions from construction activities would affect local air quality for the approximately two-year construction period. The U.S. Environmental Protection Agency (EPA) has estimated that dust emissions from construction activities associated with land clearing, excavation, and erection for large scale projects in arid (worst-case) regions amount to 1.2 tons per acre per month./1/ Soil moisture levels, vehicle movement, microclimate, and activities mix associated with the EPA emission factor and its derivation are not representative of the project area, with the consequence that the EPA factor is an estimated five to 20 times higher than the actual site emission factor for the project. With the lower factor, the 24-hour project concentration would range from 320 to 1,280 ug/m^3 (micrograms per cubic meter). Violations of the standard for total suspended particulates would occur near the site when concentrations exceeded 100 ug/m^3.

Dustfall on surfaces would be expected within 200 to 800 feet of the project site under low winds; winds could cause discomfort to individuals downwind from blowing dust. Except to persons with respiratory problems, large-size construction particulates are more of a nuisance than a hazard, and settle out of the atmosphere rapidly with increasing distance from the source, in contrast to gaseous pollutants and to small-size particulates from combustion.

Oil-based paints would generate hydrocarbon emissions. These types of emissions are controlled by Regulation 9 of the BAAQMD./2/ Diesel powered construction equipment would emit (in decreasing order by weight) nitrogen oxides, carbon monoxide, sulfur oxides, hydrocarbons, and particulates. These emmissions would increase local concentrations temporarily, but would not be expected to increase the frequency of violation of air quality standards./3/

PROJECT OPERATION

Air quality impacts associated with the operation of the project would result primarily from vehicular emissions. Combustion of natural gas for space and water heating would generate unmeasurable amounts of pollutants (primarily nitrogen oxides), relative to traffic pollutants. Probable daily emissions of pollutants resulting in 1985 from all project-related vehicle use were calculated and are shown in Table 12. Traffic generated by the project would increase exhaust emissions of lead in proportion to the increase in vehicle miles traveled. San Francisco has not violated the federal ambient lead standard for a number of years. Given present trends, regional ambient lead concentrations are expected to decrease in the future, as use of unleaded gasoline increases (unless federal standards are lowered).

TABLE 12: PROJECTED DAILY PROJECT-GENERATED EMISSIONS IN 1985 (tons/day)

	Vehicular Fuel Combustion*	1985 Projected Regional Emissions**
Carbon Monoxide	0.303	3,367
Hydrocarbons	0.026	797
Nitrogen Oxides	0.031	692
Sulfur Oxides	0.003	435
Particulate	0.005	192

*BAAQMD, 1979, EMFAC-5 Vehicular Emission Factors.
**Association of Bay Area Governments (ABAG), BAAQMD, MTC, 1979, 1979 Bay Area Air Quality Plan, pages 62-64. The region is the nine-County Bay Area Air Quality Management District.
SOURCE: Environmental Science Associates, Inc.

Roadside carbon monoxide (CO) levels have been estimated for worst-case meteorology and dispersion conditions for streets carrying project-generated traffic; the results are shown in Table 13.

The project would not result in measurable increases in roadside CO on two of the four streets analyzed: Washington and Montgomery Streets. The largest increase due to the project, a 0.7 percent and a 1.4 percent increase for the one-hour and the eight-hour values, respectively, over the base and cumulative development, would occur on Sansome Street between Pacific Avenue and Broadway.

TABLE 13: PROJECTED LOCAL ROADSIDE CARBON MONOXIDE IMPACTS*

Street	Averaging Time	1981	1984 Base Case**	1984 Base + A***	1984 Base + A + B****
Washington (Between Sansome and Montgomery)	1-hour	18.0 ppm	13.7 ppm	14.0 ppm	14.0 ppm
	8-hour	9.8	7.5	7.6	7.6
Montgomery (Between Wahington and Clay)	1-hour	18.9	14.6	14.8	14.8
	8-hour	10.7	8.2	8.3	8.3
Clay (Between Front and Davis)	1-hour	19.5	15.0	16.6	16.7
	8-hour	11.0	8.4	8.8	8.8
Sansome (Between Pacific and Broadway)	1-hour	18.2	14.0	14.4	14.5
	8-hour	9.2	7.1	7.1	7.2

* Calculations, as parts per million (ppm), for worst-case dispersion meteorology according to BAAPCD (now BAAQMD), 1975 *Guidelines for Air Quality Impact Analysis of Projects*, Updated for EPA Supplement 8 Emission Rates, 1978. Underlined values are those exceeding the applicable standard (35 ppm for one hour, nine ppm for eight hours). The Occupational Safety and Health Administration limit for worker exposure is 50 ppm (one-hour).

** Base Case for 1984 includes 0.2 percent per year non-analyzed growth.

*** A = Cumulative Downtown Development.

**** B = Proposed Project.

SOURCE: Environmental Science Associates, Inc.

A 0.6 percent increase in CO would be experienced for the one-hour value (no change in the maximum eight-hour value) on Clay Street between Front and Davis Streets No violations of air quality standards are expected to occur in the future on the streets analyzed, as a result of the project or cumulative downtown development. Air quality in the downtown area is projected to improve over the present as vehicle emission rates are reduced due to improved engine efficiency and more stringent emission controls. The rate of improvement of air quality may decrease, however, if federal implementation policies for the Clean Air Act change.

● Roadside carbon monoxide (CO) analysis was carried out for worst-case meteorology and dispersion conditions. Based on a more extensive list of projects, cumulative development (including those projects listed in Tables D-6 and D-6a) would result in a violation of an air quality standard on Clay Street, one of the four road segments analyzed in Table 13. The eight-hour standard for roadside carbon monoxide (CO) of nine parts per million (ppm) would be exceeded (assuming a full buildout of all projects by 1984) on Clay Street (between Front and Davis Streets). This violation would occur less than five percent of the time because the worst-case meteorological conditions on which the analysis is based would occur less than five percent of the time. However, assuming emission factors would continue to decrease due to increased vehicle fleet efficiency and assuming normal traffic growth, this violation would not be predicted to occur after 1985. The project would increase the one-hour average on Clay and Sansome by 0.5 and 0.6 percent, respectively, and not effect the one-hour values on the other two road segments. The project would not have any effect on the eight-hour average on any of the road segments analyzed.

In summary, implementation of the project would add to local and regional accumulations of CO, hydrocarbons and nitrogen oxides (the latter two being precursors of ozone), particulates, and sulfur oxides during adverse meteorological conditions such as inversions. The recently adopted regional Air Quality Plan found that ozone would continue to be a problem in the future, and that substantial reductions in hydrocarbon emissions would be necessary to attain and maintain the ozone standard in the Bay Area./4/ CO and particulates are also problems on a local scale. Because the project would increase emissions of hydrocarbons, CO, and particulates, attainment of the standards would be impeded. The project would probably have no measurable impact on Citywide or regional concentrations or on frequency of violations of the standards. Cumulative development, on the other hand, could increase ambient concentrations and the frequency of standard violations, if the control strategies for other emission sources that are currently envisioned in the Air Quality Plan are not implemented. However, actual air quality is expected to improve as a result of the implementation of control strategies of the Air Quality Plan and, therefore, adverse impacts on sensitive receptors are not expected to occur.

NOTES - Air Quality

/1/ U.S. Environmental Protection Agency (U.S. EPA), 1975, Compilation of Air Pollutant Emission Factors, Supplement No. 5, page 11.2.4-1.

/2/ Bay Area Air Quality Management District, Regulation 9, Rule for Architectural Coatings, adopted March 1, 1978.

/3/ U.S. EPA, 1974, Compilation of Air Pollutant Emission Factors, Supplement No. 4, pages 3.2.7-2, -3.

/4/ ABAG, BAAQMD, and the Metropolitan Transportation Commission (MTC), January 1979, 1979 Bay Area Air Quality Plan, San Francisco Bay Area, Environmental Management Plan.

H. CONSTRUCTION NOISE

Project construction would occur in three stages: demolition, excavation and construction of new buildings. Throughout the expected 27-month construction period, trucks would come to the site, initially hauling away dirt and debris and then bringing materials. (The mat foundation proposed would not require pile driving.) These activities would temporarily increase noise levels in the surrounding area.

During construction, all powered equipment, other than impact tools, must meet the San Francisco Noise Ordinance requirement of 80 dBA at 100 feet./1/ If a second piece of equipment were used concurrently with the first, it would add about three dBA, increasing the level to about 83 dBA at 100 feet. The ordinance prohibits construction work from 8 p.m. to 7 a.m. if the noise emission from such work exceeds the ambient noise level by five dBA at the property line, unless a special permit is authorized by the San Francisco Department of Public Works. Typical demolition and construction noise levels anticipated for this project are shown in Appendix F, Table F-1, page 292.

During the 13 weeks of excavation and 22 weeks of exterior finishing, noise levels would reach 64 dBA in the 601 Montgomery Street building, directly across Clay Street from the site (with windows closed). With windows open, noise levels would reach 67 dBA in the 552 Montgomery Street building, directly across Montgomery Street from the site, 71 dBA in the two- to three-story retail-office structures south of the site on Commercial Street, and 78 dBA in the two- to three-story retail-office and residential structures fronting Clay or Commercial Streets adjacent to and west of the site. Noise levels could reach as high as 65 dBA in residences west of the site, which could interfere with normal speech. Daytime sleepers could be affected up to a one block radius. Interior noise levels at the Chinatown Holiday Inn on Kearny Street would reach 45 dBA, which would not normally interfere with sleeping. Project construction noise levels at 601 Montgomery Street and 552 Montgomery Street would interfere with human speech and concentration, and require raised voices at six feet for communication. Noise levels in the two- to three- story retail-office structures would allow intermittent communication requiring raised voices at distances greater than two feet, and restrict telephone use to a marginal level.

The KABL radio station has offices and a recording studio adjacent to the site at 632 Commercial Street. Noise levels up to 70 dBA would occur in the 632 Commercial Street building during demolition and construction activities (use of jackhammers, impact wrenches) occurring close to the west property line of the project site. Levels of 50 to 60 dBA would occur with these activities at distances of 50 feet away or greater. This noise would probably make the studio unusable during construction hours, and could cause interference with speech in other offices in the building. The recording studio at this location is used primarily for recording commercials, and for a live broadcast of a Sunday evening talk show. The recording process does not occur continuosly; however, the station management desires that this capability be available on short notice. KABL has a reciprocal agreement with other radio stations for sharing studio facilities./2/ KABL does not consider its Commercial Street studio adequately insulated to allow its use during project construction./3/

NOTES - Construction Noise

/1/ San Francisco Municipal Code, Part II, Chapter VII.

/2/ Charles M. Salter Associates, Inc., Consultants in Acoustics, Bank of Canton Building EIR - Environmental Acoustics, February 19, 1982. This report is available for public review at the Office of Environmental Review, 45 Hyde Street, San Francisco.

/3/ William Clark, station manager, KABL, telephone conversation, January 15, 1982.

I. ENERGY

Pacific Gas & Electric Co. (PG&E) would provide natural gas and electricity to the project through existing distribution systems./1/ Project construction would require an estimated direct energy consumption of about 4.8 billion British thermal units (Btu) at-source, equivalent to about 820 barrels of oil (bbl oil)./2,3/ In addition, a significant, unknown amount of energy consumption would be required for fabrication and distribution of building materials.

Based on modeling compatible with data obtained from the State-approved computer energy analysis program, the project would consume approximately 115,000 Btu per square foot per year./4/ This value would meet and exceed the California Energy Commission Performance Standard of 126,000 Btu per square foot per year for office buildings with occupancy greater than 300 persons. The project would meet or exceed other requirements of the California Energy Commission./5/ Estimated total energy use for the project is 141,000 Btu at-source per square foot per year.

The project's ventilation system would be a variable air volume circulation system with an outside-air/return-air economizer cycle, using the cooling capabilities of outside air and providing individual zone control. This would reduce the air-conditioning requirements of the structure. Heating would be supplied by a natural-gas-fired boiler with a fuel-oil back-up. Air conditioning would be by a water chilling system. The project would also include a computer-based Building Automation System with temperature controls and energy monitoring functions.

The project would have a connected load of 2,700 kilowatts and would consume about 2.7 million kilowatt-hours (KWH) per year (about 230,000 KWH per average month), the equivalent of about 4,700 barrels of oil per year (see Table 14)./6/ This represents an electrical demand of about 13.8 KWH per square foot per year as compared to an average estimated electrical demand of 15 KWH per square foot per year for 10 recently proposed high-rise buildings in San Francisco./7/

TABLE 14: ESTIMATED ANNUAL PROJECT ENERGY CONSUMPTION

	Units of Energy (Thousands of Units)*	At-Source Resource Use (billions of Btu)	Barrel Oil Equiv. (Bbl Oil-rounded)**
Electricity	2,710 KWH	27.7	4,720
Natural Gas	1,860 cu. ft.	2.0	350
Gasoline	160 gallons	22.4	3,810
	TOTAL	52.1	8,880

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*1 KWH = 10,239 at-source Btu
1 cubic foot of natural gas = 1,100 at-source Btu
1 gallon of gasoline = 140,000 at-source Btu.
**1 bbl Oil = 5.88 million at-source Btu.

SOURCE: Environmental Science Associates; Skidmore, Owings & Merrill

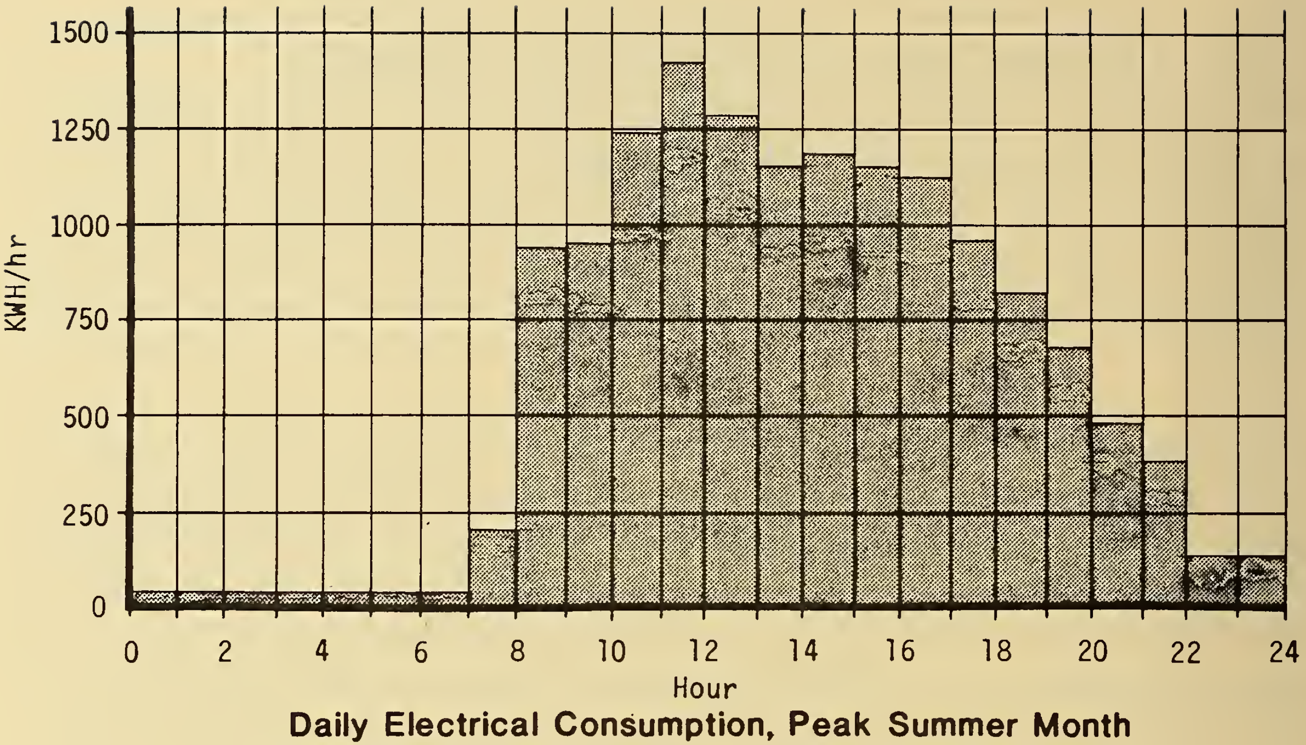
The total electrical demand of the project would be equivalent to the amount of electricity used by about 820 average residential customers in San Francisco./8/ Peak at-source electrical demand would be about 1,400 KWH per hour or 14.6 million BTU at-source (2.5 barrel of oil equivalents.) This peak would occur on August mornings and would not coincide with the PG&E system-wide (northern California service area) peak demand period which occurs on August afternoons./4/ Daily and annual electric demand curves are shown in Figure 26.

The project would require a total of about 1.86 million cubic feet of natural gas per year (2.0 billion BTU-at-source or 350 barrels of oil). Estimated natural gas use for the project would be nine cubic feet per square foot per year as compared to an estimated average of 25 cubic feet per square foot per year for recently proposed high-rise buildings in San Francisco./7/ Peak demand for natural gas for the project would be about 3,000 cubic feet per hour, equivalent to 0.5 barrels of oil, and would occur from 8 a.m. to 11 a.m. on weekday mornings in January. This would not coincide with the PG&E (northern California service area) system-wide peak period for natural gas, which occurs in the early evening hours in January. The total annual natural gas consumption by the project would be equivalent to that by about 18 average residential customers in San Francisco./8/ Daily and annual natural gas consumption patterns for the office portion of the project are shown in Figure 27.

The estimated increase in vehicle fuel use for the traffic generated by the project would total about 160,000 gallons of gasoline per year (about 22.4 billion BTU at-source, or about 3,800 barrels of oil). This estimated use is based upon the mix of vehicles expected in California in 1985./9/ In general, statewide vehicle fuel use is expected to decrease until 1995 as the vehicle fleet becomes more efficient.

NOTES - Energy

/1/ Alfred Williams, Industrial Power Engineer, Pacific Gas & Electric Company (PG&E), telephone conversation, April 24, 1981.



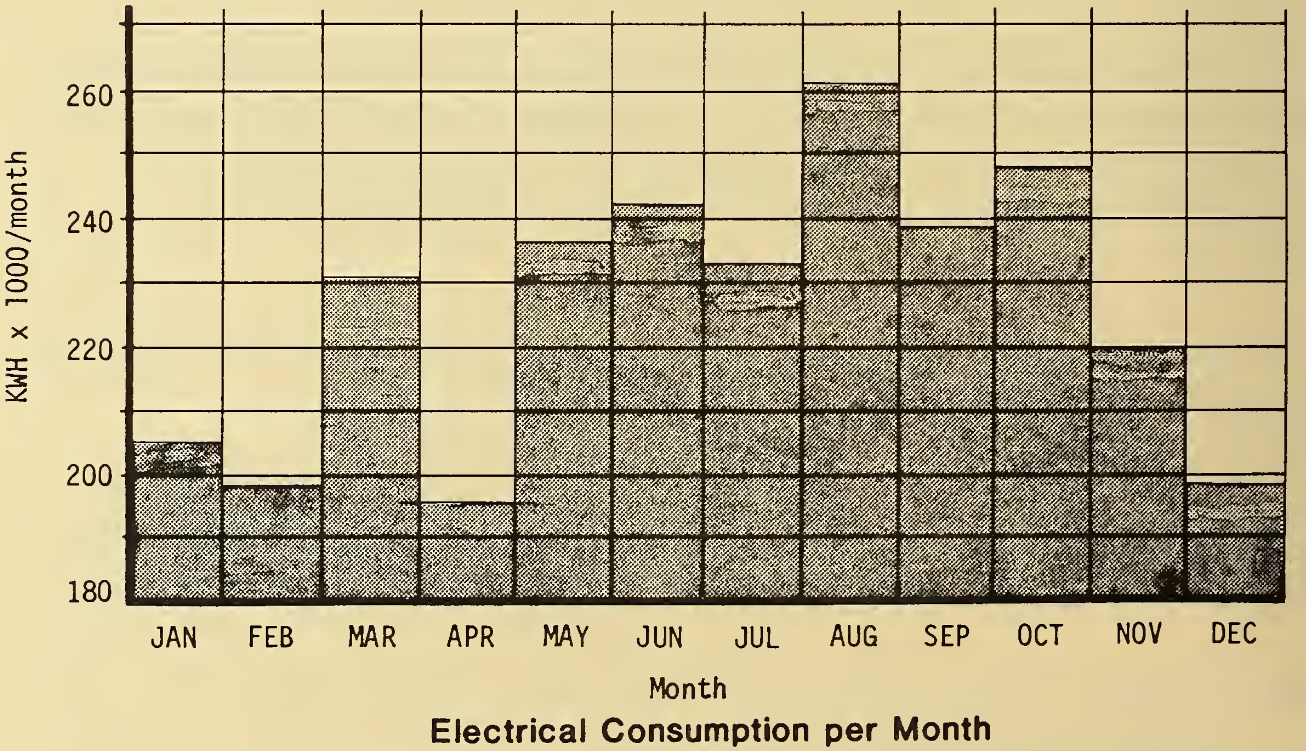
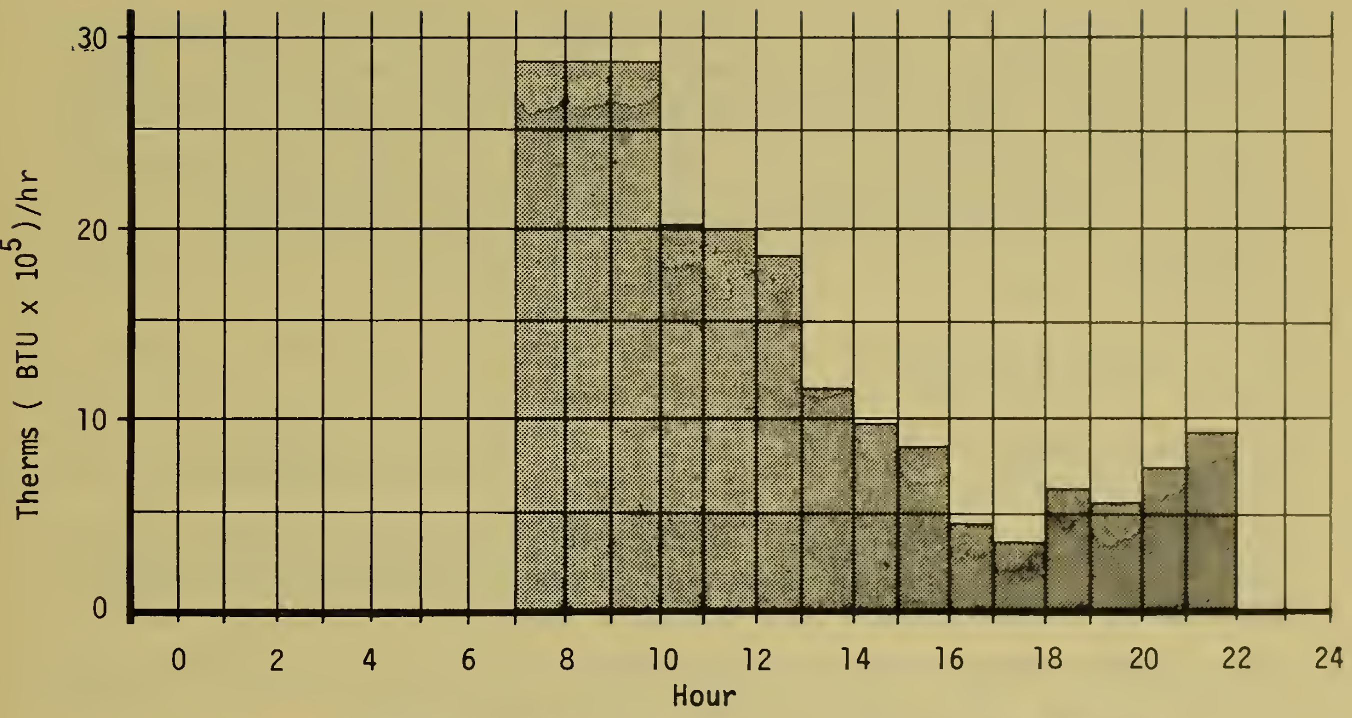
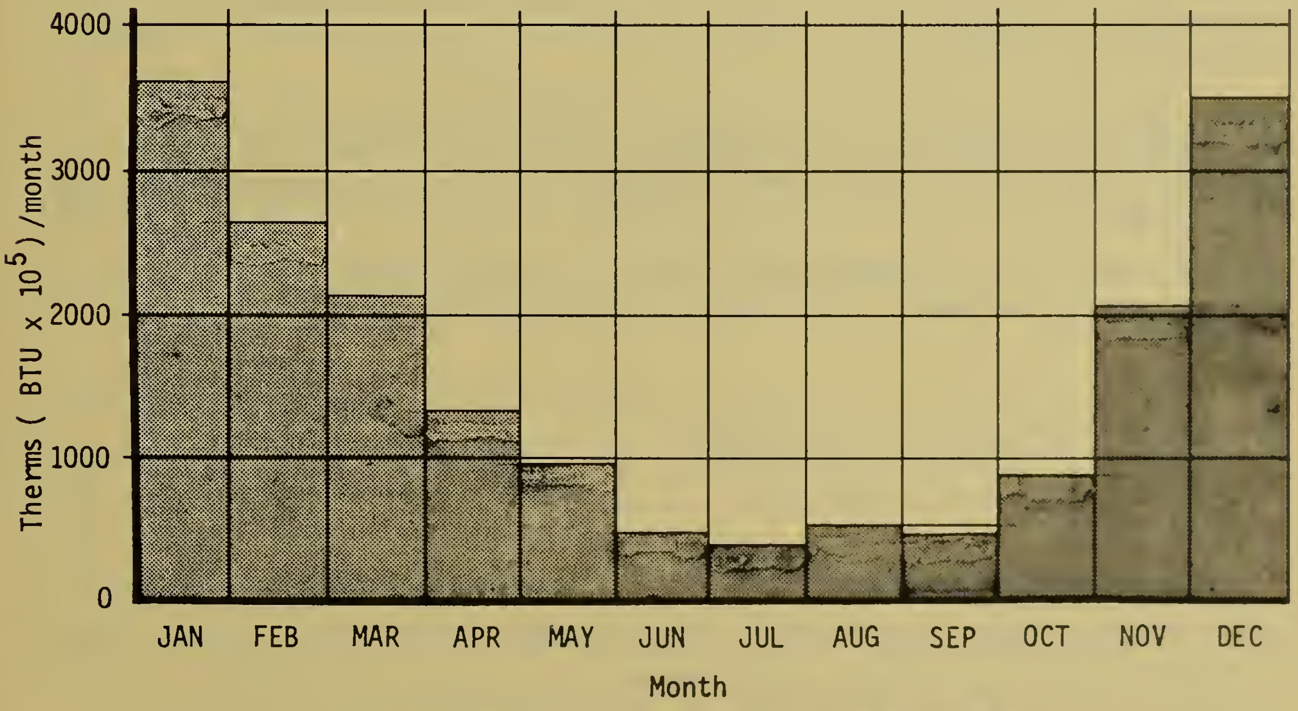


FIGURE 26: Projected Electrical Demand Distribution

SOURCE: Skidmore, Owings, & Merrill



Daily Natural Gas Consumption, Peak Winter Month



Natural Gas Consumption per Month

FIGURE 27: Projected Natural Gas Demand Distribution

SOURCE: Skidmore, Owings & Merrill

/2/ Btu, British thermal unit, a standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (252 calories) at sea level. The term 'at-source' means that adjustments have been made in the calculation of the Btu energy equivalent to account for losses in energy which occur during generation and transmission of the various forms of energy, as specified in: ERCDC, 1977, Energy Conservation Design Manual for New Nonresidential Buildings, Energy Resources Conservation and Development Commission, Sacramento, CA; and Apostolos, J.A., W.R. Shoemaker, and E.C. Shirley, 1978, Energy and Transportation, Sacramento, CA (Project 20-7, Task 8).

/3/ Construction consumption estimates from Dinwiddie Construction Company, letter, August 24, 1981.

/4/ Skidmore, Owings and Merrill, December 21, 1981 Bank of Canton EIR Utilities Estimates.

/5/ California Energy Commission, July 26, 1978, Regulations Establishing Energy Conservation Standards for New Nonresidential Buildings (California Administrative Code, Title 24, Part G, Article 2).

/6/ Connected kilowatt load is the total load of all the electrical facilities in the building if all were to operate at the same time.

/7/ Energy consumption values as reported in environmental analyses for projects listed in Appendix G, Table G-1, page 292. Per square foot consumption is based on air-conditioned space, which is a larger area than net office space in the project.

/8/ Residential comparisons were based on consumption averages in San Francisco reported in California Energy Conservation and Development California Energy Conservation and Development Commission, Quarterly Fuel and Energy Summary, Vol. 2, Nos. 1 and 2, 1976.

/9/ Apostolos, J.A., W.R. Shoemaker, and E.C. Shirley, 1978, Energy and Transportation, Sacramento, CA (Project 20-7, Task 8).

J. GEOLOGY, SEISMICITY AND HYDROLOGY

GEOLOGY

A detailed foundation and structural design study conducted for the building by a California-licensed structural engineer and a California-licensed geotechnical consultant would provide recommendations for final design and construction of the project. The recommendations would be followed by the project sponsor.

The site would be excavated to a maximum depth of 20 feet. Demolition of existing structures would require the removal of about 10,000 cubic yards of material over a period of 12 weeks; excavation would require the removal of 15,000 cubic yards of material over a period of 13 weeks. Material would be hauled via Clay Street and the freeway system to a disposal site on the Peninsula./1/

The removal of spoils from the site could cause silt and sand to spill onto streets along the haul route. Large spills would be a safety hazard to motorists, bicyclists, and pedestrians. Street dirt could also cause siltation in storm drains and be a source of dust. Montgomery, Washington and Commercial Streets would be mechanically swept by the demolition and excavation contractors, as required by the San Francisco Building Code, so that large amounts of silt would not be washed into the storm drains and dust would be reduced. This would be a provision of excavation and demolition contracts.

Building Code provisions require shoring up of excavation pit walls to prevent slumping or lateral movement of soils into the pit. (This hazard would be most likely if the soil were saturated with groundwater or if an earthquake were to occur.) The contractor would also comply with Excavation Standards of the California Occupational Safety and Health Agency, Department of Industrial Relations. The project sponsor would require the contractor to provide a bond or other financial capability and be responsible for damage to existing buildings during project construction.

Preliminary geotechnical studies indicate the proposed building could be placed on shallow spread footings or mat foundation on the dense-to-very-dense silty and clayey sands below the surface fill. The compressible Old Bay Clay Layer is not expected to contribute to settlement, because of its small area on the site, its depth, and the small portion of the total building load that would be placed on it; the current estimate of settlement is less than one inch./2/

SEISMICITY

No study of the proposed structure's seismic response has been performed. However, the structure must meet requirements of the San Francisco Building Code and other ordinances concerning seismic safety, in order to be approved. The structure would have a steel frame construction. During a major earthquake, buildings of this type would probably be damaged, but would not collapse. Building Code standards require that the exterior granite cladding not fall. Groundshaking during an earthquake could cause loose interior panel walls to be thrown out, and unattached objects, such as bookcases, to topple. Glass might fall to the street. Water mains, pipes, and underground utility lines might break, leaving the building without outside water, power, or telephone communication. Elevators could be rendered inoperable due to loss of power or damage to the elevator system. Emergency water storage for fire fighting and a power generator are required to be incorporated in new buildings by code (San Francisco Building Code, Section 3802).

The site is mapped within an area of potential liquefaction hazard (see Environmental Setting, Section III., page 62)./3/ No estimates of the effects of liquefaction on the project site have been made. Removal of the sand fill layer should prevent liquefaction from occurring./2/ (Liquefaction is the earthquake-induced transformation of a stable granular material, such as sand, into a fluid-like state, similar to quicksand.) During a severe earthquake, liquefaction could occur in the project vicinity, and affect the project if surrounding streets, utility lines, and buildings buckle, crack or settle.

HYDROLOGY

Because the site is now covered with impervious surfaces, no change in the amount of runoff or in drainage patterns is expected. If excavation were to extend below the groundwater level, dewatering would probably be required. Dewatering would probably last for three weeks; the quantity and rate of flow is expected to be minimal./2/ Dewatering can produce local subsidence in compressible geologic materials, such as artificial fill. Settlement of these materials might damage older brick and masonry buildings in the immediate site vicinity. The walls of such structures might crack or lean out of plumb and floors might be bent or tilted out of horizontal alignment. Streets and sidewalks could develop swales, cracks or "potholes", creating a potential traffic hazard. Underground utility lines, e.g. sewers, water mains, and power and telephone lines, might be bent or broken by the settlement or lateral shifting of soil caused by dewatering. Because of the potentially high costs of repairs associated with such damages, the Department of Public Works may require that a surety bond be posted before issuance of permission for excavation, depending on the extent of dewatering. The construction contractor would be held responsible for any damage clearly due to dewatering. The lowering of the water table during construction would not have a permanent impact on groundwater levels. After construction, groundwater seepage in the basement could damage basement floor and wall slabs.

NOTES - Geology, Seismicity and Hydrology

/1/ Teri Fowler, Dinwiddie Construction Company, letter, August 24, 1981.

/2/ Dames and Moore, July 21, 1981, Foundation Investigation - Phase I, Preliminary Study, Proposed Office Building, Montgomery and Clay Streets, San Francisco, California, prepared for Bank of Canton of California Building Corporation.

/3/ Blume, John A., and Associates, June 1974, San Francisco Seismic Safety Investigation, prepared for the Department of City Planning, City of San Francisco.

K. GROWTH INDUCEMENT

The project would add about 180,000 gross square feet of banking and office space in San Francisco. Employment at the site would increase by about 710, from about 170 to about 880. The Bank of Canton estimates that it would employ approximately the same number of persons in the project as it currently employs on-site. Other occupants are not yet known, but would probably include firms now in other San Francisco locations, tenants relocating from outside San Francisco, and/or firms new to the Bay Area. Therefore, the increase in employment at the project site would not necessarily represent employment that is new to San Francisco. If the building were fully leased as expected, however, and the occupancy of its space did not create permanent vacancies in other San Francisco office buildings, total employment in

San Francisco would eventually increase directly by about 710 jobs due to the project. Approximately 840 additional jobs would be indirectly supported in San Francisco through the multiplier effect (see Section IV.D., Environmental Impact, Employment, Housing, and Fiscal Factors, page 85).

The growth would be in response to the increasing demand for office space in San Francisco's Financial District. This demand would exist whether or not the proposed project were built. The demand continues the trend of growth in service sector and headquarters office activities and employment. This increase in downtown office space and employment would contribute to the continued growth of local and regional markets for goods, services and housing.

It is expected that some new project workers would desire to live in San Francisco. Employment growth, however, may not correspond directly to increases in demand for housing and for City services for residents, as some new project jobs would be held by individuals who already live in the City but who previously either did not work, or worked outside the City; by those who prefer to live in surrounding communities; or by those who would not be able to afford housing in the City.

Any net increase in employment Downtown would increase the demand for retail goods and food services in the area. Increases in employment Downtown would also increase demand for business services, to the extent that the expanded space would not be occupied by firms providing those services. (No retail space is proposed as part of the project.) In response, demand would increase for existing space and possibly for further new Downtown support development.

V. MITIGATION MEASURES PROPOSED TO MINIMIZE THE POTENTIAL ADVERSE IMPACTS OF THE PROJECT

In the course of project planning and design, measures were identified that would reduce or eliminate potential environmental impacts of the proposed project. Some of these measures have been, or would be, adopted by the project sponsor or project architects and contractors and thus are proposed as part of the project; some are under consideration, and some have been rejected. Each mitigation measure and its status are discussed below. Measures under consideration and/or measures rejected by the sponsor may be required by the City Planning Commission as conditions of project approval.

URBAN DESIGN

MEASURES PROPOSED AS PART OF THE PROJECT

- The project would restore the Old Sub-Treasury Building, City Landmark No. 34, for public use, as a proposed Pacific Heritage Museum. This use would enhance pedestrian interest on Commercial Street.

- The proposed office tower would be set back 16 feet, behind the Commercial Street frontage of the Sub-Treasury, to reduce the visual effect of the office tower on the Sub-Treasury facade, as viewed from Commercial Street.

- The proposed one-story portion of the banking hall at the Commercial - Montgomery Street corner would maintain the existing low-scale continuous street facade on Commercial Street.

- The project would include base, tower and top elements with varied three-dimensional treatment of windows and granite cladding, to create visual interest.

- The project would include mature street trees and sidewalk plantings on Montgomery, Clay and Commercial Streets. These could reduce pedestrian sidewalk space. These measures would be implemented in consultation with the Department of City Planning and the Department of Public Works to maintain adequate sidewalk pedestrian flows.

WIND

PROPOSED AS PART OF PROJECT

- The project would include mature street trees, planters or other small structures on Commercial or Clay Streets. This measure would act as windbreaks to reduce the moderate wind speed ratios generated by the project. These measures would be implemented in consultation with the Department of City Planning and the Department of Public Works to maintain adequate sidewalk pedestrian flows.

MEASURES REJECTED

- The project could be set back at lower stories to allow more area for wind to pass through Clay and Commercial Streets to reduce wind speeds. The sponsor has rejected this measure because it would result in smaller, less economic floor sizes, could conflict with plans to restore the Old Sub-Treasury Building, and would not respond to City urban design policies that discourage buildings including base elements of smaller floor area than upper floors.

CULTURAL AND HISTORIC FACTORS

MEASURES PROPOSED AS PART OF THE PROJECT

- The project would restore and incorporate, entirely for public use, the Old Sub-Treasury Building, City Landmark No. 34, located on the site of the first U.S. Branch Mint, for public use. About 400 square feet of the structure, not now visible from the street, would be removed to allow development of the office building core. The Sub-Treasury Building would house a Pacific Heritage Museum, which would display interior elements of the structure, including the coin vault, decorative columns, steel beam and corrugated iron floor system and interior brick walls. The Museum would also display exhibits pertaining to the art and history of Asian and Pacific immigrant groups in California.

- Should evidence of cultural or historic artifacts of significance be found during project excavation, the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board would be notified. The project sponsor would select an archaeologist or other expert to help the Office of Environmental Review determine the significance of the find and whether feasible measures, including appropriate security measures, could be implemented to preserve or recover such artifacts. The Environmental Review Officer would then recommend specific mitigation measures, if necessary, and recommendations would be sent to the State Office of Historic Preservation. Excavation or construction which might damage the discovered cultural resources would be suspended for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate.

EMPLOYMENT, HOUSING AND FISCAL FACTORS

MEASURES PROPOSED AS PART OF THE PROJECT

- The Bank of Canton would offer space in the project building to those tenants currently renting office space on-site, and would provide relocation assistance to those tenants who would be displaced by the project.

- The project sponsor has made a commitment to contribute to the City Housing Production Program investment pool. The pool is a shared equity program to reduce monthly housing payments for eligible San Francisco home purchasers. A letter describing this commitment is on file at the

Office of Environmental Review, 450 McAllister Street./1/ This housing assistance would be secured by a second lien mortgage on a proportional share of equity appreciation, for selected housing units in San Francisco. The sponsor would contribute $930,000 to this investment pool. This total is based on the net demand for 155 housing units expected to be generated by the project, at a $6,000 contribution per unit. The shared equity program is administered by the Mayor's Office of Housing and Community Development./2/

MEASURES UNDER CONSIDERATION

- If the shared appreciation program were not implemented by the City, the Bank of Canton would consider alternative measures to mitigate the expected housing demand for 155 dwelling units generated by the project. These alternative measures could include purchase of housing bonds, if issued by the City; operation of a below-market-rate residential construction loan program; or a donation to the City for the rehabilitation of housing.

TRANSPORTATION, CIRCULATION AND PARKING

MEASURES PROPOSED AS PART OF THE PROJECT

- The project sponsor would participate proportionately in whatever measures are adopted finally by the Board of Supervisors to contribute funds for transit development and improvement, to meet the peak transit demands caused by cumulative office development in the Downtown area.

- A transportation broker in the project management office would encourage transit use through the on-site sale of BART, Muni, and Golden Gate Transit passes to employees, and by distributing transit information. The broker would encourage employee carpool and vanpool systems, in cooperation with the non-profit RIDES for Bay Area Commuters, by providing a central clearinghouse for carpool information. An annual report on the activities of the broker would be submitted to the Transportation Planning Section of the Department of City Planning.

- The project sponsor would provide secure and safe bicycle and moped parking facilities to encourage the use of bicycles and mopeds by employees and messengers.

- During the construction period, truck movement would be planned to minimize peak-hour traffic conflicts. The project sponsor and construction contractor would meet with the Traffic Engineering Division of the Bureau of Engineering and with the Office of Environmental Review to determine feasible traffic mitigation measures to reduce traffic congestion during construction of this project, and other projects (including the 456 Montgomery Street and the Montgomery-Washington buildings).

- The project sponsor would require, by contract, that the general contractor provide off-street parking for construction workers on the project site or at an off-site location with a shuttle to the site, to minimize demand for on-street parking by construction workers.

- Paving, landscaping and structures in the sidewalk area would be designed (subject to Department of Public Works approval) to minimize interference with pedestrian traffic, and to coordinate with potential wind effect mitigation measures.

- Building directories and signs for the freight elevators would be placed in the loading area of the building, consistent with proposed off-street loading requirements contained in Guiding Downtown Development.

- The building would have "eyebolt" fixtures, suitable for suspending Muni trolley wires, on the Montgomery and Clay Street frontages.

- The Bank would implement a flexible time system (flex-time) for its employees consistent with the Bank of Canton's operational needs. Flex-time is designed to reduce peaks of congestion in the transportation system. Upon project completion, with the help of the Department of City Planning, the project sponsor would encourage tenant firms to implement flex-time for employee working hours.

- The project sponsor would conduct a survey, at a time suggested and in accordance with methodology approved by the Department of City Planning, to assess actual trip generation patterns of project occupants and actual pick-up and drop-off areas for carpools and vanpools. The project sponsor would make this survey available to the Department. Alternatively, at the request of the Department, the sponsor would provide an in-lieu contribution toward an overall City-conducted transportation survey for the Downtown area.

- The project would include on-site storage for trash containers. Containers would not be placed on streets or sidewalks except during actual trash pickup.

MEASURES UNDER CONSIDERATION BY THE PROJECT SPONSOR

- The project sponsor would meet the staff of the Transportation Planning section of the Department of City Planning to attempt to implement recommendations of the Department's Center City Circulation Study regarding Commercial Street. Changes in the street or sidewalks would require approval from the Department of Public Works. The Planning Commission could require this measure as a condition of project approval.

MEASURES THAT COULD BE IMPLEMENTED BY PUBLIC AGENCIES AND UTILITIES

- The overcapacity that would occur in Muni, BART, A-C Transit and the SamTrans mainline route (Highway 101) due to cumulative development in the Downtown could be mitigated by provision of additional buses, by headway changes and, possibly, by shifts in routes. Implementation of all or part of this mitigation measure would depend primarily on the availability of funds and on actions initiated by MTC and the respective transit agencies and districts. Funding could also come from legal measures (now under litigation) adopted by the Board of Supervisors to improve Downtown transit service.

- Pacific Gas and Electric Company could coordinate work schedules with other utilities requiring trenching so that street disruption would take place during weekends and off-peak hours. This would be done through the San Francisco Committee for Utility Liaison on Construction and Other Projects (CULCOP). CULCOP is composed of representatives of private utilities and city agencies, who coordinate activities at monthly meetings at which projects undertaken by the agencies are reviewed. This measure would coordinated to assure that area residents would not be disturbed at night.

AIR QUALITY

MEASURES PROPOSED AS PART OF THE PROJECT

- During dry-season excavation, the general contractor would sprinkle unpaved demolition and construction areas with water at least twice a day to hold down dust. This would reduce particulate emissions (dust) by about 50 percent.

- The general contractor would maintain and operate construction equipment in such a way as to minimize exhaust emissions.

CONSTRUCTION NOISE

MEASURES PROPOSED AS PART OF THE PROJECT

- The general contractor would construct barriers around the site, and around stationary equipment such as compressors, to reduce construction noise by as much as five dBA.

- The general contractor would locate stationary equipment in pit areas or excavated areas to serve as noise barriers to the extent possible.

- The project sponsor and contractor would reduce or suspend operations as necessary during one hour pre-taping programs, if a mutually agreeable time were agreed upon, or the project sponsor would pay up to $100 in expenses per session for KABL to move its recording operation to another site. Upon a 24-hour notification by KABL, the sponsor would cease construction activities during taping of spot commercials. During demolition, the wall adjacent to the KABL studios would be removed at a time when recording was not in progress. The project sponsor would install barriers over the top-floor skylights in order to minimize the danger of falling material during construction and reduce the transmission of construction noises. As required, temporary lighting would be installed in the affected offices./3/ Similar barriers would be provided on the 635 Clay Street building skylight.

- Construction activities would be limited to hours between 7 a.m. and 7 p.m. to reduce disturbance to residents of buildings west of the site.

MEASURES REJECTED

- The project sponsor could pay for noise insulation of the KABL studio at 632 Commercial Street with two layers of gypsum board, separated from the existing walls by six inches of R-19 glass fiber insulation, to reduce the effect of construction noise and vibration on the radio station. The sponsor has rejected this measure because of their proposed announcement of construction schedules to allow use of the KABL studio, or alternative studios, during the construction period. The Planning Commission could require this measure as a condition of project approval.

ENERGY

MEASURES PROPOSED AS PART OF THE PROJECT

- Wherever possible, office suites would be equipped with individual light switches, time-clock operation and fluorescent lights to conserve electric energy. A centralized management computer system would monitor off-hour (evening and weekend) heating and air-conditioning use.

- The project would comply with the formerly required Federal Energy Building Temperature Restrictions in the operation of heating, ventilating and air-conditioning (HVAC) equipment. The HVAC system would be equipped with an economizer cycle to use outside air for cooling, where appropriate.

- Office water heating systems would be insulated with non-asbestos-containing material to minimize waste heat and water use.

- The project would provide containers to collect and store recyclable solid wastes (such as glass, metal, computer cards, and newspaper) and the project sponsor would contract for recycling service.

GEOLOGY, SEISMICITY AND HYDROLOGY

PROPOSED AS PART OF THE PROJECT

- A detailed foundation and structural design study conducted for the building by a California-licensed structural engineer and a California-licensed geotechnical consultant would provide recommendations for final design and construction of the project. The recommendations would be followed by the project sponsor.

- The project sponsor would post a surety bond, if required by the San Francisco Department of Public Works, before issuance of a permit to excavate. Such a bond would protect the City against damages to City-owned sidewalks, streets and utilities.

- ● The project sponsor would require the project contractor and sub-contractors to obtain a Faithful Performance and Payment Bond, if proper financial capability is not evident, to be responsible for any damage to the Old Sub-Treasury Building, a designated City Landmark, by dewatering of the foundation or other act which might result from excavation.

- ● Groundwater observation wells would be installed for monitoring the level of the water table and other instruments would be emplaced to monitor potential settlement and subsidence. The City would require a lateral and settlement survey to monitor any movement or settlement of surrounding buildings and adjacent streets during the dewatering. Control lines and benchmarks would be established for monitoring horizontal and vertical movement. Costs for the survey and any necessary repairs to services under the streets would be borne by the contractor. The Environmental Review Officer and President of the Landmarks Preservation Advisory Board will be advised of findings during the monitoring of water table levels, settlement and subsidence.

- If, in the judgement of City engineers, unacceptable subsidence occurs during the construction, groundwater recharge would be begun to halt the settlement. This might cause a delay in construction.

- Groundwater pumped from the site would be retained in a holding tank to allow suspended particles to settle, if this is found necessary by the Industrial Waste Division of the Department of Public Works, to prevent sediment from entering the storm drain/sewer lines.

EMERGENCY RESPONSE PLAN

PROPOSED AS PART OF THE PROJECT

- An evacuation and emergency response plan would be developed by project-sponsor or building-management staff, in consultation with the Mayor's Office of Emergency Services, to insure coordination between the

City's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. The project's plan would be reviewed by the Office of Emergency Services and implemented by building management before issuance by the Department of Public Works of final building permits.

NOTES - Mitigation Measures

/1/ Dean L. Macris, Director of Planning, letter to Lawrence J. Lau, Vice Chairman, Bank of Canton of California Building Corporation, January 29, 1982.

/2/ Mayor's Office of Housing and Community Development, *Citywide Affordable Housing Program*, January 22, 1982.

/3/ Dr. Lawrence J. Lau, Vice Chairman, Bank of Canton of California Building Corporation, letter to William Clark, General Manager, Station KABL, May 27, 1982.

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

EMPLOYMENT, HOUSING AND FISCAL FACTORS

The project would result in an increase in office space of about 183,000 gross square feet. The project would cause the loss of 800 gross square feet of retail space and 22 residential hotel units (now vacant). The project would result in a net increase in on-site employment of about 710 employees, which would create a demand for about 155 new housing units in San Francisco.

TRANSPORTATION, CIRCULATION AND PARKING

The project would include no parking spaces, and would generate a demand for about 240 parking spaces per day.

The project would contribute to cumulative impacts on Muni and other transit agencies; the project would increase transit ridership and transit loading by up to 0.3 percent on non-Muni systems and about one percent during the peak-hour on the Muni systems.

ENERGY

Projected total energy use by the project would be about 52 billion Btu at-source per year. The project would also have an associated consumption of about 160,000 gallons of gasoline for project-generated vehicular traffic. Total project energy consumption would be equivalent to about 9,170 barrels of oil per year.

[Page 141 has been deleted.]

VII. ALTERNATIVES TO THE PROPOSED PROJECT

A. ALTERNATIVE 1: NO PROJECT

DESCRIPTION OF ALTERNATIVE

This alternative would entail no change to the project site as it now exists. The five buildings which occupy the project site would remain, presumably in substantially the same conditions and uses that exist in 1981 (see Section III., Environmental Setting, pages 32-63, for a discussion of existing conditions).

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

The environmental characteristics of this alternative would remain substantially as described in Section III., Environmental Setting, pages 32-63). With no project, existing structures on the site would be retained in their present condition. Present levels of traffic; parking demand; transit demand; air pollution; noise; energy consumption; on-site employment; public service demand; housing demand; and wind, shadow and visual effects now attributable to the buildings on the site would continue to exist. This alternative would not result in the proposed restoration of the Old Sub-Treasury Building and increased public access to the City Landmark.

SPONSOR'S REASONS FOR REJECTION

The present space occupied by the Bank of Canton of California in five structures, in the opinion of the project sponsor, is inefficient and is insufficient for future Bank expansion. In addition, the existing buildings at the site contain about 23 percent of allowable buildable floor area under the City Planning Code and thus do not provide an optimum return on investment potential.

The project sponsor has rejected the no-project alternative because it would continue use of existing inefficient structures on site, and would not fulfill the sponsor's goal of enhancing the site with a unified design.

B. ALTERNATIVE 2: COMBINED OFFICE AND RESIDENTIAL USE, INTERIM CONTROLS

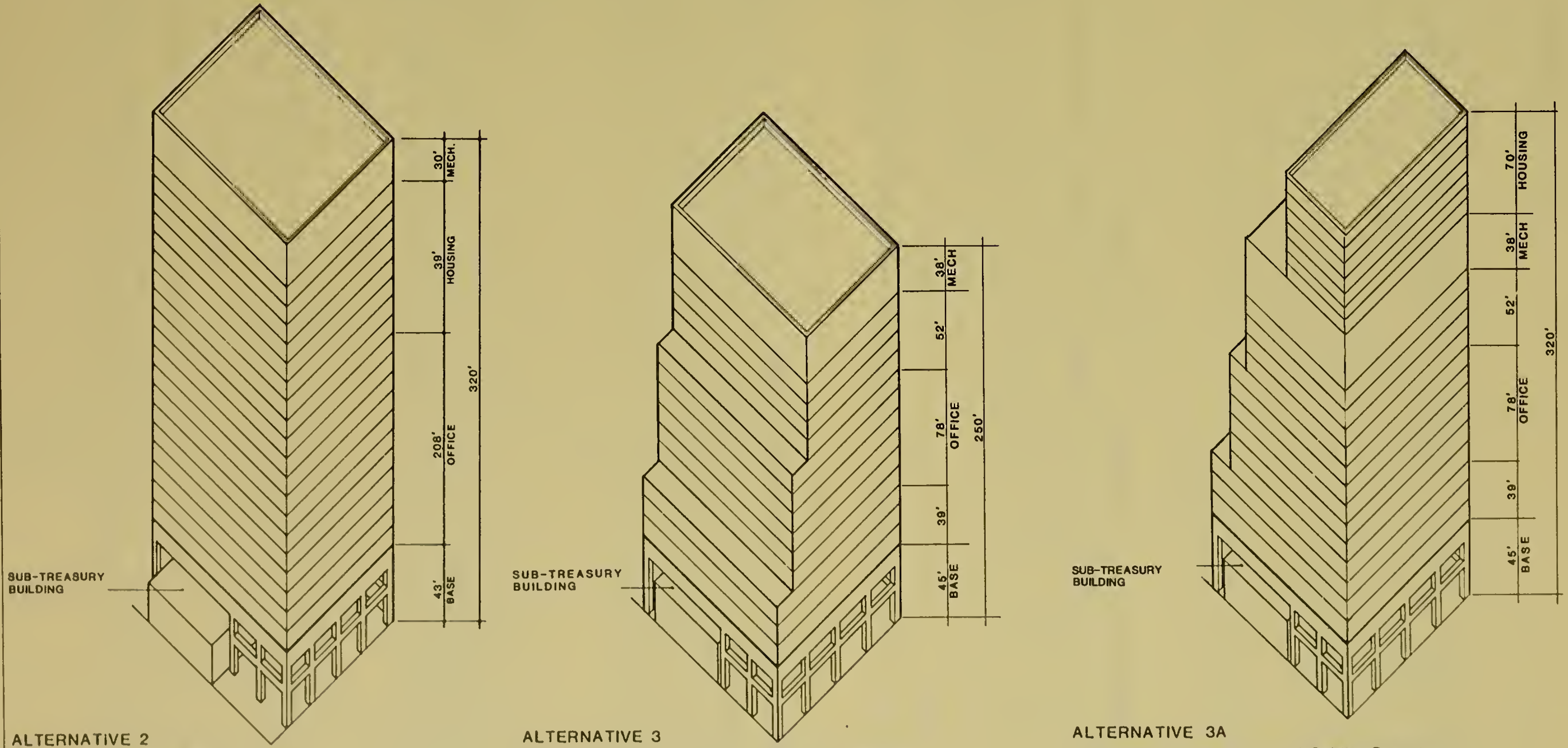
DESCRIPTION OF ALTERNATIVE

This alternative would consist of a structure that would occupy the same site and contain the same gross floor area of office use as the proposed project and would include additional floor area for residential use, as permitted under Interim Controls./1/ Use of a corner lot bonus (allowable for housing) of about 41,000 gross square feet could result in the following uses (see Figure 28): 230,000 gross square feet of office space. (This could be in a base level and banking hall, mezzanine, plus 16 office floors, at 13,650 gross square feet per floor); and 41,000 gross square feet of housing (three floors at 13,650 gross square feet per floor, providing 47 condominium units at an average 880 gross square feet per unit).

Total gross floor area would be about 271,000 square feet and overall height would be 320 feet, compared to 230,440 square feet and 282 feet for the project. (320 feet is the Planning Code height limit applicable on the western portion of the site.) A minimum of one parking space per four residential units would be required, or 12 spaces, for the residential use. The alternative would probably include one space per unit, or 47 parking spaces, compared to none in the project as proposed. The 35 additional spaces would require a Conditional Use Permit. The alternative would also require a variance from Planning Code rear-yard setback requirements for the residential floors.

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

As with the proposed project, this alternative would require demolition of five of the structures which now occupy the project site, and dislocation of about 100 tenants or employees (excluding Bank of Canton employment).



ALTERNATIVE 2
Mixed Use Under Interim Controls

ALTERNATIVE 3
Office Use Under Proposed Guiding Downtown Development Controls

ALTERNATIVE 3A
Mixed Use Under Proposed Guiding Downtown Development Controls

SOURCE: Skidmore, Owings and Merrill

FIGURE 28: Project Alternatives

The greater height of the alternative would increase its visibility from short- and medium-range view points, such as Chinatown, and the structure would cast longer shadows. During morning hours in spring and fall months, it would shade the easterly portions of Portsmouth Square. (About one-quarter of the park would be shaded betwen 7:30 a.m. and 8:30 a.m. in mid-March, and 8:30 and 9:30 a.m. in mid-September.) Because of intervening structures, shadow effects of this alternative at other times of day and seasons of the year would be similar to those of the project.

The principal distinguishing characteristic of this alternative would be provision of housing. The 47 housing units would accommodate approximately 30 percent of the net housing demand directly generated by the project (see Environmental Impact, Section IV.D., Employment, Housing and Fiscal Factors, page 86). As the housing units would probably sell for at least $200,000, residents would consist primarily of upper- and upper-middle income households of which the principal income earner(s) would work Downtown, perhaps in the building itself.

The transportation effects of the office portion of this alternative would be similar to the effects of the proposed project. The residential portion of the alternative would generate approximately 375 vehicle-trip ends per day, and approximately 15 percent more person trip ends per day than the project with a more balanced (in terms of direction and time of day) travel pattern.

Because the building residents would probably generate fewer commute-related impacts than would the office-workers, the overall impacts of this alternative on traffic, transit and parking demand (and associated fuel consumption, noise and air pollution levels) would probably be less than 15 percent higher than the proposed project.

The alternative would expose residents to the environmental conditions of the Downtown area, including greater levels of traffic, noise, and air pollution than are common in most outlying residential areas. These conditions are similar to those in nearby residential areas including Chinatown, North Beach and the Golden Gateway Center, all within one-half mile of the site. The nearest public schools are Washington Irving Intermediate, about one-half mile to the north, and Commodore Stockton Primary, one-half mile to the west. Grocery shopping is available in Chinatown; the nearest supermarket is in the Golden Gateway Center about one-quarter mile to the northeast. An office-residential high-rise project, including 40 condominium units, has been approved at Montgomery and Washington Streets, one block north of the site.

The fiscal implications of this alternative are difficult to project, but would probably be similar to those of the proposed project, as revenue gains attributable to a higher assessed project value (due, in turn to higher construction costs and reassessments of condominium units upon resale) could be partly offset by possible increased service costs attributable to the introduction of a residential use in a predominantly commercial/office business area; these costs could include those for fire and police protection and for general administration.

SPONSOR'S REASONS FOR REJECTION

The Bank has rejected this alternative because providing adequate parking for residential units would conflict with proposed plans to restore the Old Sub-Treasury Building as part of the project. The Sub-Treasury basement, office building core, and additional space for a residential service core would leave an L-shaped residual space which would preclude development of parking facility with adequate space for ramps, parking stalls and maneuvering room. Parking access would limit development of off-street loading facilities./2/

In addition, the Bank of Canton of California is restricted by the California Financial Code to owning real estate directly related to banking operations, and is prohibited from owning residential property (California Financial Code, Chapter 6, Section 750)./3/ The Bank of Canton would fulfill City requirements to meet housing demand generated by the proposed office space through alternative means (See Mitigation, Section V, page 131).

C. ALTERNATIVE 3: OFFICE PROJECT CONSISTENT WITH CONTROLS PROPOSED IN "GUIDING DOWNTOWN DEVELOPMENT"

DESCRIPTION OF ALTERNATIVE

This alternative would consist of a structure similar to the project, but consistent with the 12:1 FAR limit proposed for the C-3-0 Use District in the Department of City Planning's report, Guiding Downtown Development (GDD), May 1981. The alternative would contain about 198,000 gross square feet of floor area and 14 office floors above the lobby and second floor level, and would be about 250 feet high (see Figure 28, page 144). This would be consistent with the proposed height limit in GDD of 250 feet on the western portion of the site and be below the proposed 320-foot limit on the eastern portion. This alternative could also incorporate other major proposed measures in GDD. The report proposes a maximum average floor area of 20,000 square feet (with a greater area permitted if floor area is transferred from upper floors to lower floors), and a maximum average diagonal building measurement of 200 feet. This alternative would have an average diagonal measurement of about 165 feet. To reduce the appearance of bulk of the upper portions of buildings, GDD would require that the average floor area above the midpoint of building height be 2/15 less than the average floor area below the midpoint. The alternative would meet this criterion (see Table 15).

GDD proposes an open space, recreational or cultural facility requirement, at a 1:25 ratio to gross office area, or 7,900 square feet for this alternative. The proposed Pacific Heritage Museum in the restored Old Sub-Treasury Building, including the roof area open space, would contain about 9,000 square feet and would meet this requirement. One off-street loading space (to the nearest whole number) per 100,000 gross square feet of office space would be required by GDD, or two spaces for this alternative. The two loading spaces included would meet this standard.

GDD proposes that Commercial Street between Battery and Kearny Streets be a Commercial Recreation special use district where the character and scale of existing development would be preserved. Small shops and food and beverage services could be required as a condition for project approval. If the

TABLE 15: COMPARISON OF PROJECT WITH GUIDING DOWNTOWN DEVELOPMENT ALTERNATIVES

Major Development Controls Pertaining to Project Site	Proposed Project	Proposed Requirements Guiding Downtown Development	Alternative 3	Alternative 3A
Base FAR	14:1	12:1*	12:1	12:1 office space 3:1 residential
Height Limit	282 ft.	320/250 ft.**	250 ft.	320 ft./250 ft.
Average Area per Floor	14,000 sq. ft.	20,000 sq. ft. above 65 ft.	14,000 sq. ft.	11,400 sq. ft.
Maximum Diagonal Length	170 ft.	200 ft. average diagonal dimension	165 ft.	164 ft.
Size of Upper Floors	Same as upper Floors	Average floor area of floors above midpoint of building height to be 2/15 (13%) less than average floor area of floors below midpoint.	14,600 sq. ft. average floor area below midpoint; 12,000 above	14,400 sq. ft. average floor area below midpoint 9,400 above
Incorporation of Art	As part of Pacific Heritage Museum	Art equal to 1% of total construction costs.	As part of Pacific Heritage Museum	As part of Pacific Heritage Museum
Ground-floor retail	Not required	2,000 maximum sq. ft. per use to obtain floor area bonus	About 3,000 sq. ft.	About 3,000 sq. ft.
Recreation/Open space	Not required	1 sq. ft. for public use per 25 sq. ft. of gross floor area (about 7,900 sq. ft. at an FAR of 12:1).	9,000 sq. ft., as Pacific Heritage Museum	Same, plus 2,700 for residential uses
Off-street loading	2 spaces	0.1 spaces per 10,000 sq. ft. of gross floor area for buildings containing more than 100,000 ft. (two spaces for the site).	Two spaces	Two spaces
Long-term Parking	None	None permitted for office uses	None	57 spaces for residential uses
Provision of Housing	Off-site	60 sq. ft. per 1,000 sq. ft. of office space (about 135 units for the site); Maximum FAR equal to 5:1 on-site	Off-site	57 units on site, plus off-site

*Additional FAR allowable for provision of housing (5:1); retention of or tranferring development rights from significant architectural buildings (3:1); and for the provision of retail uses containing 2,000 sq. ft. or less per use (0.5:1). The maximum FAR, including allowable bonuses, is 17:1.

**Two height units apply to project site.

SOURCE: City Planning Code; and Guiding Downtown Development, May 1981.

alternative were to provide retail services on Commercial Street, it would remove space planned for the Pacific Heritage Museum or the banking hall (no existing retail uses on Commercial Street would be displaced by the project). The proposed museum would be a pedestrian-oriented use, fronting on Commercial Street. GDD proposes that new structures in Commercial Recreation Districts be sited and shaped to maximize sunlight penetration. Buildings may be required to be set back above the 40-foot elevation in steps defined by a 75 degree plane, to a maximum set back of 50 feet. This alternative would not meet this option under GDD because of proposed GDD-required downward bulk transfer. The building setbacks of this alternative beginning at the seventh floor would increase sunlight penetration to Commercial Street, compared to the project.

Small-scale retail space would also be encouraged through provision of a maximum 0.5 FAR bonus for inclusion of small-scale retail uses (2,000 square feet per establishment or less) in the project. GDD would allow the Department of City Planning to require inclusion of such uses on the ground floor of new buildings to meet the retail, service and dining needs of office workers and visitors. As noted above, if the alternative included retail space, space allocated for the Pacific Heritage Museum or banking hall would be reduced.

Housing requirements for office development under GDD for this alternative would be about 133 units (based on the discussion in Environmental Impacts, page 88). The sponsor would cause these units to be provided off-site in a similar fashion as for the project (see Mitigation Measures, Section V., page 131).

Transfer of unused development rights from an architecturally or historically significant structure, and use of a 50 percent floor area bonus for restoration of the Old Sub-Treasury Building, could allow the floor area of this alternative to approach a 13:1 ratio. Increasing the floor area of this alternative would increase the height of the structure in the eastern portion of the site, where a 320-foot height limit would apply.

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

As with the proposed project, this alternative would require demolition of the structures on the site and could include restoration of the Old-Sub Treasury Building.

The lesser height of this alternative, compared to that of the project, would reduce its visibility, and the structure would cast shorter shadows. During morning hours in spring and fall, the alternative would shade a lesser area of Kearny and Clay Street sidewalks than the project. Other shadow effects of the alternative would be similar to those of the project.

The transportation effects of this alternative would be proportionately smaller than those of the project, generating about 15 percent (8 percent with a 13:1 FAR alternative) fewer trip-ends per day. Overall effects of Alternative 3 on vehicular levels of service on nearby streets and transit service would be similar to those of the proposed project. Energy, noise and air pollution effects of the project would also be somewhat reduced in this alternative. The fiscal effects of Alternative 3 would also be similar to those of the project, with lower revenues from the project initially offset by lower service costs attributable to the alternative. Over time, service costs may rise faster than revenues from the alternative (see Environmental Impacts, page 94).

SPONSOR'S REASON FOR REJECTION

The project sponsor has rejected this alternative because it would provide a less economically feasible project than currently permitted under existing planning controls, and would not support the cost of restoring the Old Sub-Treasury Building and and structurally separate tower above it./4/ A lower economic return would also reduce the feasibility of maintaining the Old Sub-Treasury Building for public use as a museum. In addition, the bulk transfer encouraged by GDD would conflict with the design goal of reducing the change in scale around the Old Sub-Treasury Building and Commercial Street frontage. Columns to support the building setbacks would pass through the Sub-Treasury Building with this alternative, which could interfere with development of that building as a museum and reduce the architectural integrity of the interior of a designated landmark./5/

D. ALTERNATIVE 3A: COMBINED OFFICE-RESIDENTIAL PROJECT CONSISTENT WITH CONTROLS PROPOSED IN "GUIDING DOWNTOWN DEVELOPMENT"

DESCRIPTION OF ALTERNATIVE

This alternative would consist of a structure that would occupy the same site and contain 12:1 FAR of office use and 3:1 FAR of residential use, resulting in the following project (see Figure 28, page 144): 198,000 gross square feet of office space (Base level, banking hall, and mezzanine plus 14 office floors, and 50,400 gross square feet of housing (seven floors at 7,200 gross square feet per floor, providing 57 condominium units at an average 880 gross square feet per unit).

This alternative would have a total gross floor area of 247,400 square feet, about 17,000 square feet or seven percent greater than the project, and would be about 320 feet tall, compared to 282 feet for the project. (It would be 250 feet tall on the western portion of the site, consistent with proposed GDD height limits.) A minimum of 15 parking spaces would be required for the residential units; the alternative would probably provide one space per unit, or 57 spaces. The 42 additional spaces would require a Conditional Use Permit. GDD bulk-control, open-space or cultural-facility, off-street-loading, and retail features of this alternative would be similar to those of Alternative 3, above (see Table 15, page/148). The San Francisco Planning Code, Section 135, also requires usable open space as part of residential development. In a C-3 district, 36 square feet of private open space per unit is required. If common open space were provided, the ratio would be 48 square feet per unit. For this alternative, about 2,000 square feet of private or 2,700 square feet of common space would be required. The alternative would include this as balconies or decks, or enclosed solariums, as provided in the Code. The setback from the west property line would provide the required 25 percent rear-yard area for residential floors required by the Planning Code.

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

The visual and shadow effects of this alternative would be similar to those of Alternative 2, described above, except for reduced bulk because of building setbacks. (The setbacks would be on the west facade of the building to allow development of maximum floor area of the residential component (see Figure 28, page 144.)

The 57 housing units would accommodate about 40 percent of the net housing demand generated by the alternative. (Housing demand for this alternative would be about 15 percent lower than for the proposed project, or about 133 units.) As the housing units would probably sell for at least $200,000, it may be assumed that their residents would consist primarily of upper- and upper-middle income households of which the principal income earner(s) would work Downtown, perhaps in the building itself.

The transportation effects of the office portion of this alternative would be similar to the effects of the proposed project. The residential portion of the alternative would generate approximately 450 vehicle-trip ends per day, and would generate approximately seven percent more person-trip ends per day than the project, with a more balanced (in terms of direction and time of day) travel pattern.

Because the building residents would probably generate fewer commute-related impacts than would the office-workers, the overall impacts of this alternative on traffic, transit and parking demand (and associated fuel consumption, noise and air pollution levels) would probably be less than seven percent higher than those of the proposed project.

The alternative would expose residents to the environmental conditions of the downtown area, including greater levels of traffic, noise, and air pollution than are common in most outlying residential areas. These conditions are similar to those of nearby residential areas including Chinatown, North Beach and the Golden Gateway Center, all within one-half mile of the site. The nearest public schools are Washington Irving Intermediate, about one-half mile to the north, and Commodore Stockton Primary, one-half mile to the west.

Grocery shopping is available in Chinatown; the nearest supermarket is in the Golden Gateway Center about one-quarter mile to the northeast. An office-residential high-rise project, has been approved at Montgomery and Washington Streets, one block north of the site, with 40 condominium units.

The fiscal implications of this alternative are difficult to project, but would probably be similar to those of the proposed project, as revenue gains attributable to a higher assessed project value (due, in turn to higher construction costs and reassessments of condominium units upon resale) could be partly offset by possible increased service costs attributable to the introduction of a residential use in a predominantly commercial/office business area; these costs could include those for fire and police protection, and general administration.

SPONSOR'S REASONS FOR REJECTION

The project sponsor has rejected this alternative because the reduced office space developed would be less economically feasible than the project. Height limits proposed in GDD also limit the residential space developable to less than the 5:1 FAR that would be permitted in GDD. The economic feasibility of the residential portion would also be reduced because of the small area of residential floors that would be serviced by a separate elevator and utility care.

In addition, the Bank of Canton has rejected this alternative for reasons described above, under Alternative 2, Combined Office and Residential Use, Interim Controls, page 146.

E. ALTERNATIVE 4: RETENTION OF EXISTING RESIDENTIAL HOTEL

DESCRIPTION OF ALTERNATIVE

This alternative would retain the vacant 22-unit residential hotel at 619-623 Clay Street and return it to residential use. The remaining portion of the site could be developed with office space. The alternative would include about the same floor area as the proposed project, through transfer of buildable area from the hotel site to the remaining L-shaped portion of the site. Because of reduced floor size, the alternative would be about 300 feet tall, or 20 feet taller than the project.

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

The alternative would preserve 22 residential hotel units and the Bank of Canton would not be required to provide replacement units under Ordinance No. 330-81, as with the project. Provision of an adequate office building lobby, elevator and service core and off-street truck bays with this alternative would preclude retention and restoration of the Old Sub-Treasury Building. Other environmental effects would be similar to those of the proposed project, except for longer shadows cast by the taller building.

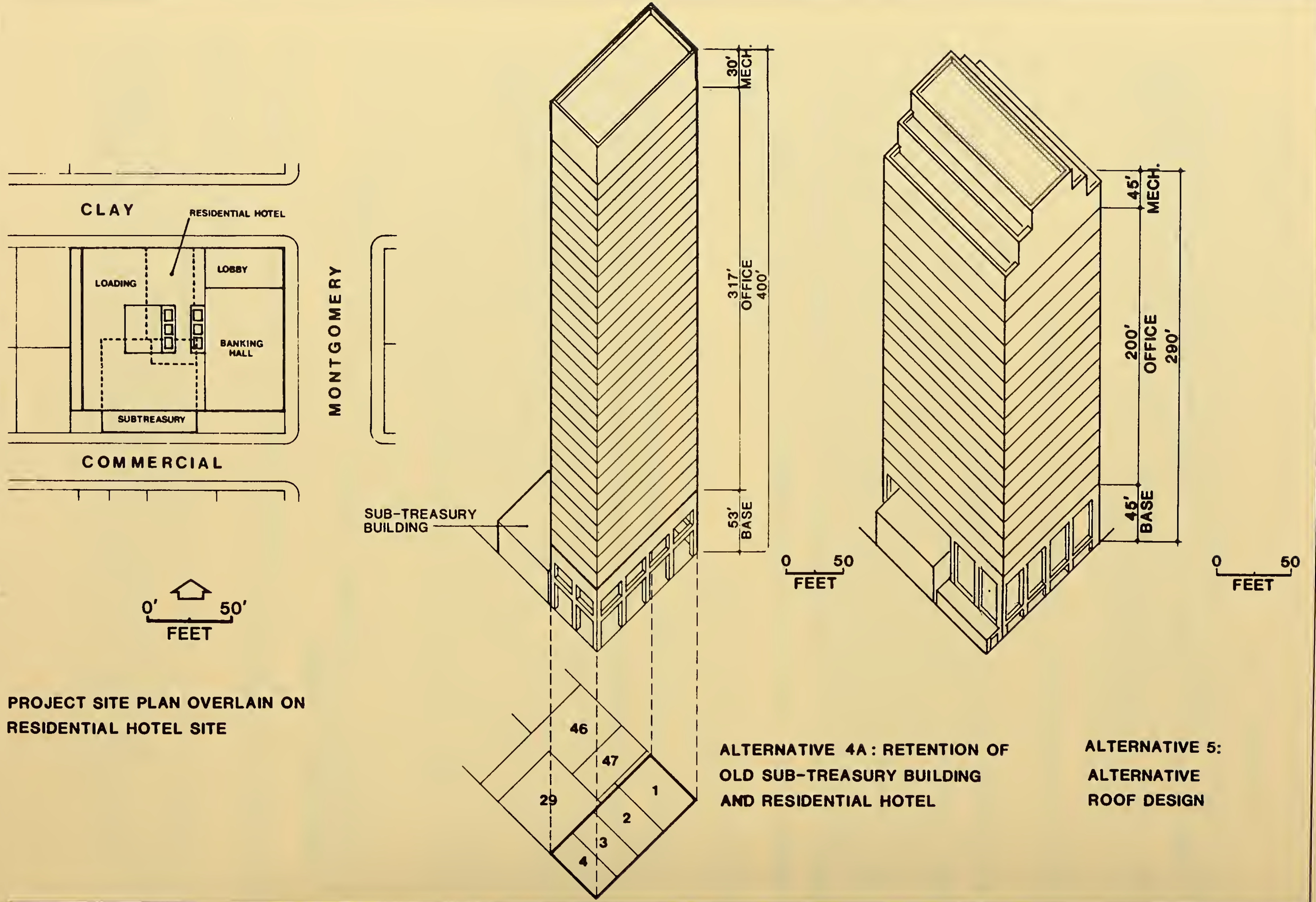
SPONSOR'S REASONS FOR REJECTION

The Bank of Canton has rejected this alternative because it would conflict with plans to retain and restore the Old Sub-Treasury Building and because of legal restrictions on bank ownership of residential property (see Alternative 2, page 146). The Bank is currently undertaking measures to fulfill requirements to replace the residential hotel units now on the site. The Bank rejected this alternative also because the smaller site available for development would result in an uneconomic floor plan (see Figure 29).

F. ALTERNATIVE 4A: RETENTION OF EXISTING RESIDENTIAL HOTEL AND OLD SUB-TREASURY BUILDING

DESCRIPTION OF ALTERNATIVE

This alternative would retain the residential hotel and return it to residential use, and retain the Old Sub-Treasury Building. The lots fronting Montgomery Street would be developed with a 400-foot tall office building of



PROJECT SITE PLAN OVERLAIN ON RESIDENTIAL HOTEL SITE

ALTERNATIVE 4A: RETENTION OF OLD SUB-TREASURY BUILDING AND RESIDENTIAL HOTEL

ALTERNATIVE 5: ALTERNATIVE ROOF DESIGN

SOURCE: Skidmore Owings and Merrill

FIGURE 29: Alternatives 4A and 5

about 176,000 gross square feet, an FAR of about 11:1. The 400-foot height limit would limit development below the 14:1 FAR permitted (see Figure 29).

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

This alternative would preserve the 22 residential hotel units and the Bank of Canton would not be required to provide replacement units under Ordinance No. 330-81. The alternative would retain the Old Sub-Treasury Building in its present state. The alternative would cast longer shadows than the project, and would shade the easterly portion of Portsmouth Square in mornings during spring and fall. (About one-half of the park would be shaded between 7:30 a.m. and 8:30 a.m. in mid-March and 8:30 a.m. and 9:30 a.m. in mid-September.) Other effects of the project would be reduced about 25 percent, compared to the project, because of smaller overall size.

SPONSOR'S REASONS FOR REJECTION

The Bank of Canton has rejected this alternative because of the inefficient floor area, reduced banking hall size, and lower total usable floor area compared to the project. The economic return from this alternative would not support Bank plans to restore the Old Sub-Treasury Building./5/

G. ALTERNATIVE 4B: PRESERVATION OF ENTIRE OLD SUB-TREASURY BUILDING AS PART OF PROPOSED PROJECT

DESCRIPTION OF ALTERNATIVE

This alternative would be similar to the proposed project, except that the service core and elevator shafts would be relocated about 20 feet north to avoid removal of 400 square feet of the northeast corner of the Old Sub-Treasury Building. This would require a longer structural span between the core and the south wall of the tower, which in turn would increase the sizes of beams required and thus increase the floor-to-floor height for the tower. The alternative would be about 300 feet tall, 20 feet taller than the project.

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

The alternative would have similar effects to those of the project, except that the tower would be 20 feet higher, with increased visual and shadow effects.

SPONSOR'S REASONS FOR REJECTION

The Bank of Canton has rejected this alternative because of the additional structural costs and the reduction in depth of leasable area in part of the office floors as a result of moving the core towards the north wall.

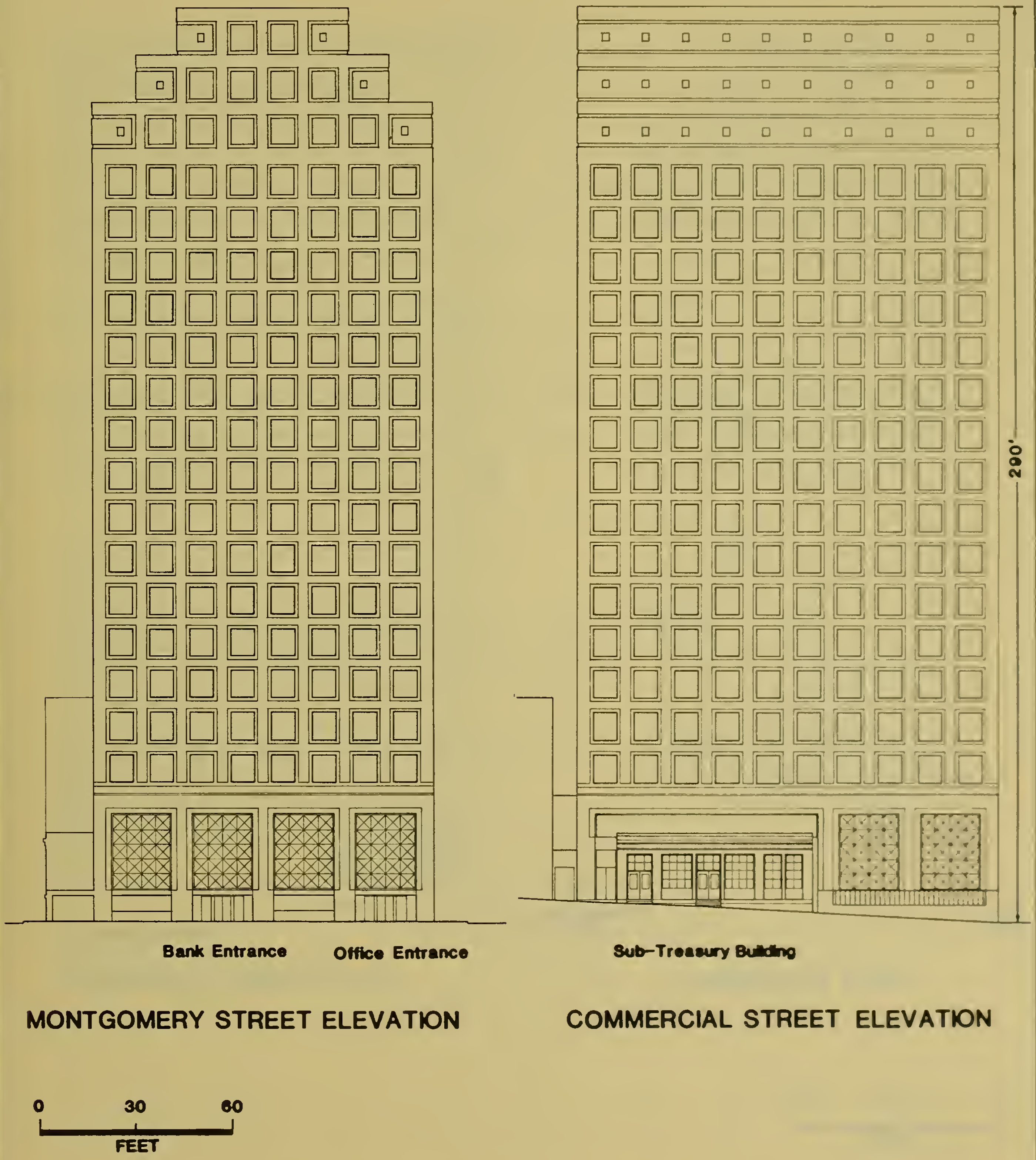
H. ALTERNATIVE 5: ALTERNATIVE ROOF DESIGN

DESCRIPTION OF ALTERNATIVE

This alternative would be similar to the proposed project, except that the north and south facades of the mechanical floor would each include two setbacks. The overall height at the central portion of the mechanical floor would be 290 feet, compared to 282 feet for the project (see Figure 29, page 155, and Figures 29a and 29b, pages 157a-157b).

DISTINCTIVE ENVIRONMENTAL CHARACTERISTICS OF ALTERNATIVE

The alternative would have similar effects to those of the project, except that the setbacks would result in a tower with different visual and shadow effects. The setbacks would decrease the appearance of bulk of the structure, as seen from viewpoints to the east and west. This alternative would respond to Master Plan Urban Design policies proposed in Guiding Downtown Development (pages A-18 through A-20). These include the policy that "the top of new buildings of similar height to other nearby highrise towers should be shaped and detailed to disguise the similarity. The position of the building in the skyline should be considered in shaping the top."

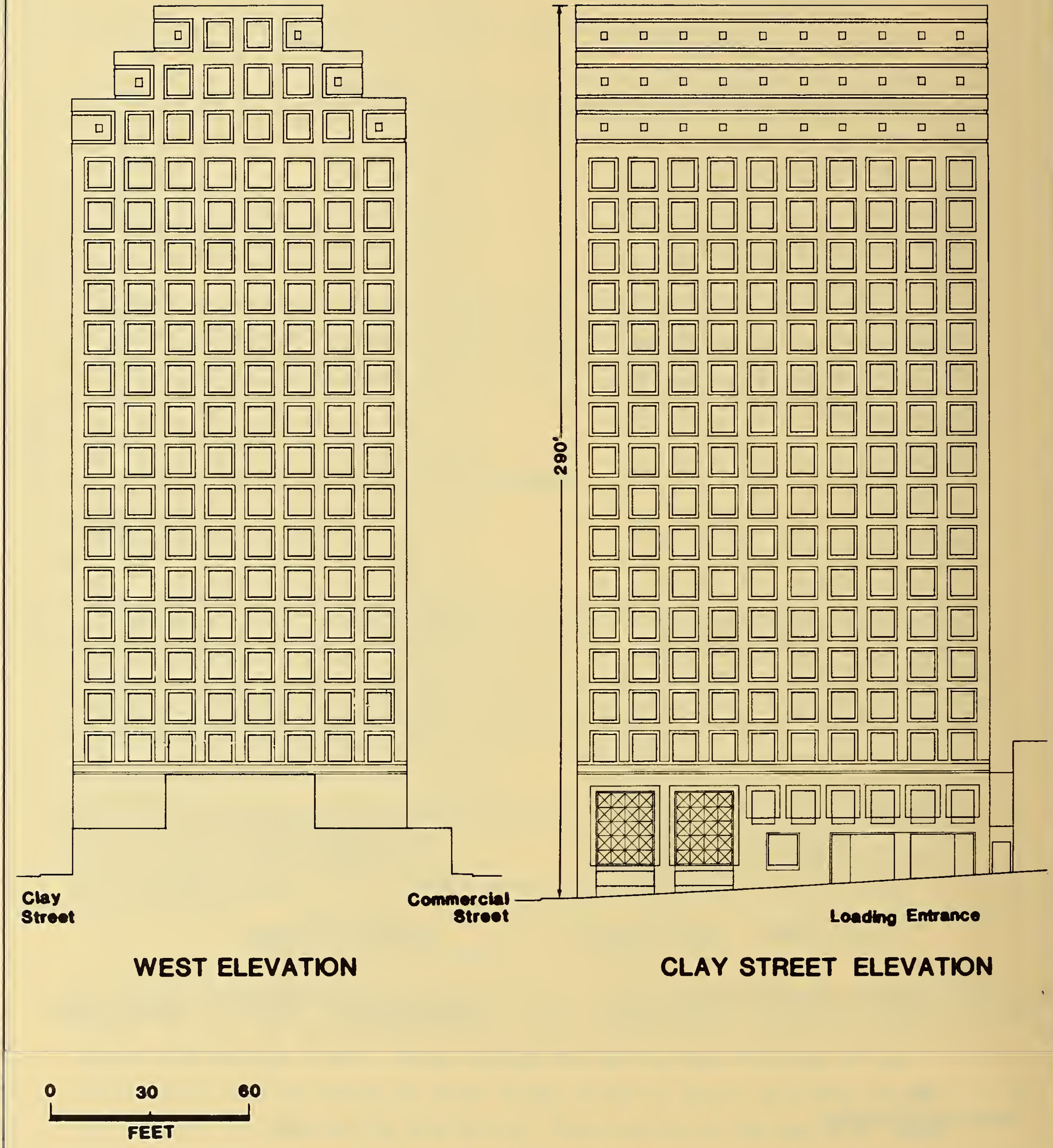


MONTGOMERY STREET ELEVATION

COMMERCIAL STREET ELEVATION

SOURCE: Skidmore, Owings & Merrill

● FIGURE 29a: Revised Roof Design – Commercial Street and Montgomery Street Elevations



SOURCE: Skidmore, Owings & Merrill

● FIGURE 29b: Revised Roof Design – Clay Street and West Elevations

The taller portion of the tower would cast longer shadows than the project and would shade Portsmouth Square, including benches south of the pedestrian bridge to the Chinatown Holiday Inn, and would shade the Kearny Street entrance to the Portsmouth Square garage, from about 7:30 a.m. to 8:30 a.m in mid-March, and 8:30 a.m. to 9:30 a.m. in mid-September. Other shadow effects on open space or sidewalks near the project site of the alternative would be the same as those of the proposed project

UNDER CONSIDERATION BY PROJECT SPONSOR

- The project sponsor is considering this alternative because of the positive visual effects of the roof design that may justify the additional structural costs required.

NOTES - Alternatives

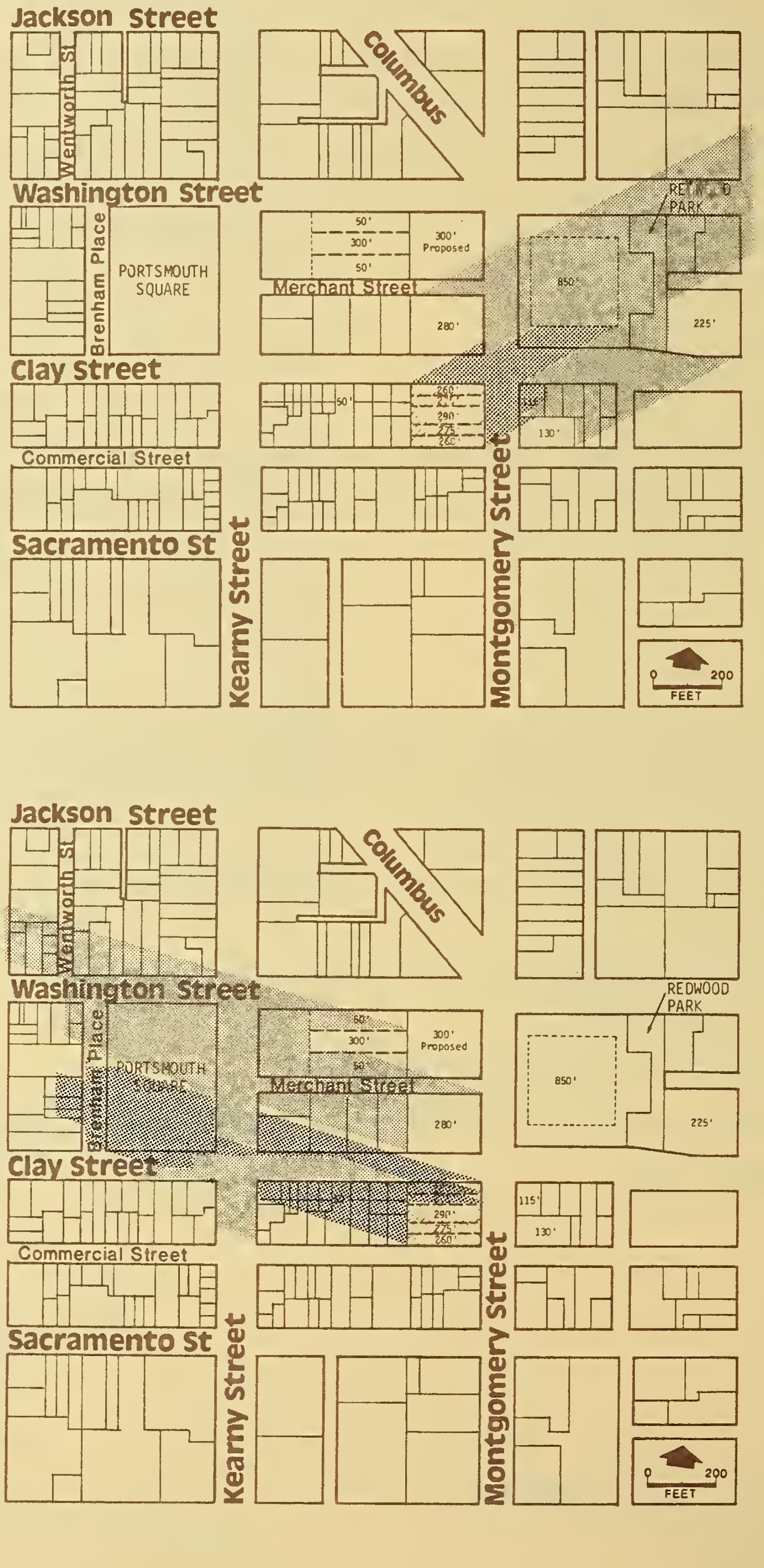
/1/ City Planning Commission Resolution No. 8474, January 17, 1980. Board of Supervisors Ordinance 240-80, June 1, 1980, established the interim limitations on use of bonuses in effect until July 1, 1981. This ordinance was subsequently extended until March 1, 1983.

/2/ David MacMillan, Skidmore, Owings and Merrill, project architects, memorandum, October 15, 1981.

/3/ Joseph W. Russell, Lillick McHose & Charles, attorneys-at-law, letter, January 12, 1982.

/4/ Dinwiddie Construction Co., letter, November 4, 1981.

/5/ Richard Tobias, Skidmore, Owings and Merrill, project architects, letter, January 15, 1982.



December
4 P.M. Standard Time

LEGEND

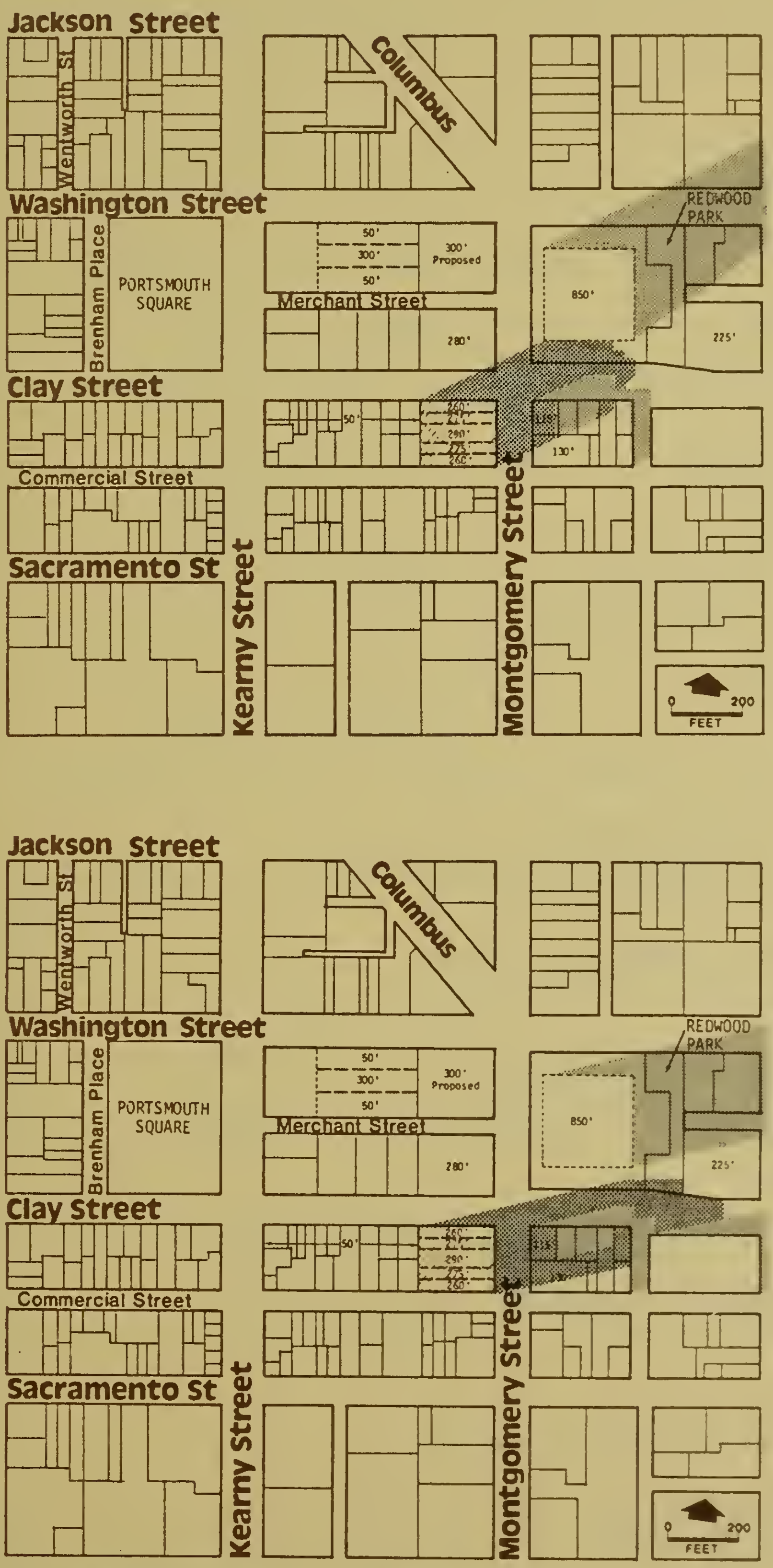
▨ Project Location

░ Existing Shadow

▒ Project Shadow

March
7 A.M. Standard Time
September
8 A.M. Daylight Saving Time

● FIGURE 29c: Projected Shadow Patterns: Revised Roof Design – December Afternoon; March and September Morning



March
3 P.M. Standard Time
September
4 P.M. Daylight Saving Time

LEGEND

▨ Project Location

▢ Existing Shadow

▩ Project Shadow

March
4 P.M. Standard Time
September
5 P.M. Daylight Saving Time

● FIGURE 29d: Projected Shadow Patterns: Revised Roof Design - March and September Afternoon

SOURCE: Environmental Science Associates, Inc.

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VIII. SUMMARY OF COMMENTS AND RESPONSES

A. INTRODUCTION

This section contains summaries of the public comments received on the Draft Environmental Impact Report (EIR) prepared for the proposed Bank of Canton of California Headquarters project, and responses to those comments.

All substantive spoken comments made at a public hearing before the City Planning Commission on April 29, 1982, and all written comments received during the public review period from March 26, 1982 through May 13, 1982, have been reviewed and are presented here by direct quotation, edited to omit repetition and nonsubstantive material only.

Comments and responses are grouped by subject matter and are arranged by topics corresponding to the Table of Contents in the EIR. Each group of comments is followed by its set of responses; the order of the responses under each topic follows the order of comments under that topic. As the subject matter of a topic may overlap that of other topics, the reader must occasionally refer to more than one group of Comments and Responses to review all information on a given topic. Where this occurs, cross-references are provided.

These comments and responses will be incorporated into the Final EIR as a new chapter. Text changes resulting from comments and responses were incorporated into the EIR, as indicated in the responses.

B. LIST OF PERSONS COMMENTING

Susan Bierman, Member, San Francisco City Planning Commission

Michael Harney, Affordable Housing Alliance

Sue Hestor, San Franciscans for Reasonable Growth

Paul Hughes, Acting District CEQA Coordinator, CalTrans District Four

F. Thomas Huster, attorney for Frank Han, owner of 635 Clay Street

Tony Kilroy, San Franciscans for Reasonable Growth

Jonathan Malone, Secretary, San Francisco Landmarks Preservation Advisory Board

Dr. Knox Mellon, State Historic Preservation Officer

David Nietto

Michael Segall

Michael Visconti, Association of Bay Area Governments

Sherman Wang, American Asian Bank

C. COMMENTS AND RESPONSES

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1. LAND USE AND ZONING

BANK OF CANTON BRANCHES

COMMENT

"I notice that they have two other branches in Chinatown, one at 743 Washington Street, and one at 1201 Stockton Street. Their existence is not even acknowledged in the EIR.

"If they don't own it [743 Washington Street] and have a lease, I question why they should have a branch bank two blocks away from their main headquarters, especially in light of the fact that there is, in effect, a moratorium on savings and loans and branch banks in Chinatown because of the bid-up effect that they have on rents and the displacement of small businesses."

"If they don't own it and have a lease, they should give up a lease when they have the ability to occupy this new building and let it go into some commercial activity other than branch banks or savings and loans."

"1201 Stockton is five blocks away. I think the record should indicate, do they own the building? If they own it, you know, are they going to continue to use the premises? If they lease the premises, are they planning on vacating? In either case on those two branches, I suggest that you need to put a condition in this resolution that does not allow them to expand their services in that, and not even to request it because they are getting a lot of administrative space... two blocks away and five blocks away." (Sue Hestor)

"And you also need a history of when they occupied the property, who they displaced -- those three properties -- who they displaced, and any expansions that they have gone through, and any proposals that they have, in this EIR, so you can mitigate them.

"With regard to the buildings on those three properties [743 Washington, 555 Montgomery, and 1201 Stockton], I think they need to be indicated on all of the maps of the EIR in terms of the ownership or the status, that they are Bank of Canton property, because I think it is very interesting to see branches as close to the headquarters as this one, and I think there are mitigation questions that need to be raised." (Sue Hestor)

RESPONSE

The Bank of Canton branch at 743 Washington Street (between Kearny Street and Grant Avenue) was purchased by the bank in 1960. The structure is the former Chinese Telephone Exchange, built in 1909 as a replica of a Chinese pagoda. Figure 20, page 47 of the EIR identifies the structure as included on the City's list of architecturally or historically significant buildings. The project sponsor has restored and maintains this structure and intends to continue to do so as an important part of Chinatown and San Francisco./1/ The branch of the bank occupies all of the

2,120-square-foot building, with 10 employees. The bank has no plans for alteration or expansion of this branch. Usable space could not be expanded given the old building's present envelope./2/

The Bank of Canton branch at 1201 Stockton Street (at Pacific Avenue) was leased in 1972, for a period of 10 years, with two five-year renewal options. The previous occupant was a produce market. The branch occupies 3,230 square feet of the ground floor and basement with 13 employees. Expansion of this branch would require displacement of other retail uses in the building. The bank has no plans for expansion of this branch./2/

The Montgomery Street properties (on the proposed project site) now occupied by the Bank were acquired in 1937, 1941 and 1948. 608 Commercial Street (The Old Sub-Treasury Building) was acquired in 1970. The history of the uses and occupancy of this structure is described in Section III., Environmental Setting, pages 43-44 of the EIR. The 631 and 619-23 Clay Street buildings were acquired in 1979 and 1980. The occupancy of these two structures is described on pages 32 and 35, and Table 5, page 84, of the EIR.

The bank considers the main branch at 555 Montgomery Street, established in 1937, and the two branches discussed above as necessary to serve the Chinatown community. The bank was established in 1937, as the first Chinese-community-owned bank in San Francisco. The branches were established in response to the needs of the Bank's customers, many of whom are senior, non-English-speaking and non-drivers. The bank considers it essential that services be located in easy walking distance of these customers./1/

For comparison, the Bank of America, with headquarters at California and Kearny Streets, about three blocks from the project site, has five branches in the Chinatown-North Beach area, at 552 Montgomery Street, 701 Grant Avenue, 944 Stockton Street, 1455 Stockton Street and 270 Columbus Avenue.

The Board of Supervisors passed a temporary ordinance (File 267-81-2), in October, 1981, to expire October 5, 1982, that established a moratorium on new or expanded banks and savings and loans offices within the area bounded by Kearny Street, Sacramento Street, Powell Street, Broadway, and Columbus Avenue. The ordinance was passed as a measure to limit displacement of neighborhood-serving retail uses by financial institutions.

USE OF 636 CLAY STREET

COMMENT

"With regard to 636 Clay Street, which they have in the EIR as the temporary facility during construction. That building has housed, it is my understanding, a multiservice center for the Filipino community, and that facility is being moved in to one owned by the Chinatown Housing Corporation, the Community Housing Corporation [Chinese Community Housing Corporation].

"If they have a lease that goes beyond the period that they will need it, I think there should be a requirement they sublease only to a nonprofit corporation for community services because those services are having the hardest time surviving in Chinatown because of the rents escalation." (Sue Hestor)

RESPONSE

The Bank of Canton acquired a four-year lease at 636 Clay Street in November 1981, for 5,120 square feet of ground floor space for use as a temporary branch during construction of the project. Previous occupants of the space were a barber shop until August 1981, and a sandwich shop (until April 1981). The Manilatown Senior Center occupies 2,000 square feet of basement space, with an entrance on Clay Street. After establishment of the temporary bank branch, the center would continue in its present space; its entrance would be changed to Merchant Street, on the the north side of the building.

The senior center is also pursuing lease negotiations with the Chinese Community Housing Corporation (CCHC) for about 2,000 square feet of space at 651 Clay Street to relocate the center. The CCHC is rehabilitating the 83-unit residential Clayton Hotel at that address./3/

Based on beginning project construction in the second half of 1982, and a 27-month construction period, the bank would occupy the space at 636 Clay Street until early 1985, when bank operations would move to the new building. About nine months would remain on the lease, until November 1, 1985. Any sublease would require approval of the owner of 636 Clay Street, and would require modifications to the terms of the lease which specify occupancy by a financial institution.

NOTES - Land Use and Zoning

/1/ Dr. Lawrence J. Lau, Vice Chairman, Bank of Canton of California Building Corporation, memorandum, May 18, 1982.

/2/ Danny F. Lee, Vice President, Bank of Canton of California Building Corporation, memorandum, May 14, 1982.

/3/ Michael Neumann, Chinese Community Housing Corporation, telephone conversation, May 26, 1982.

2. URBAN DESIGN AND VIEWS

PROJECT DESIGN

COMMENTS

"I think pages 24, 25, and 27 show very graphically the ugliness of the building.... On page 67 and a couple of other places the architect talks about how he is intending to relate the building to the other structures around. The architect's intention. Well, I would contend to you that, if he is relating to anything, he is relating to the ugliest stuff downtown. And I would like him to try to relate to some of the nice buildings. There are really lovely buildings, including some of the newer ones, not just the older ones that are around the site. And I think the architect could do a lot better design and a lot better relation to the around it. And that's picked up in several other places." (Sue Hestor)

"I have worked on Montgomery Street for the last 30 years and about 15 years I worked right across from the proposed site of the building.... From what little I know about this project, it seems to me it would be a great improvement. I remember 30 years ago Montgomery Street was a pretty sad part of town in this area. Just as a concerned citizen, it seems to me if we always had such difficulty with any building that was going to go up, we would never have any progress. And I'm not an expert in any of the areas,... but when it comes to esthetics, I hear her [Ms. Hestor] say, 'I don't like this.' And at one look at the picture, it looks fine to me.

"I'm not commenting on any merits or demerits of the report, but I think we should have in this City the flexibility to put up new and progressive buildings if they meet with the Code and by architectural review by the proper commission so they will generally serve the enhancement of the City."
(Michael Segall)

RESPONSE

Visual effects of the project, and the relationship of the project design to City urban design policies are discussed on pages 67-73 of the EIR, Section IV., Environmental Impacts. Alternative 5, Alternative Roof Design, discussed on pages 157-158 of the EIR, is under consideration by the project sponsor; the alternative would incorporate two setbacks in each of the north and south facades of the mechanical floor intended to achieve positive visual effects. Other design alternatives including building setbacks, and reasons for rejection, are discussed on pages 147-153 of the EIR. (See also Section 10, Alternatives to the Proposed Project, page 227 of this section.) As may be seen from the commentors' views, urban design, continues to be, in part, a subjective matter for individual judgement.

VIEWS OF THE PROJECT

COMMENT

"On page 69, I don't like that [Figure 22], particularly, that goes with it when they're discussing the views. When I look at the map [Figure 22] on page 69 and the view from Chinatown at Powell and Clay, I really think they are going to lose something. They are going to lose the view of kind of a stepped back effect. Right now when you look at the place where the project is, you have a kind of a terracing effect of the building[s] stepping up. And the EIR in the text says, well, nothing will be lost because they already are blocking the views because of whatever is that building that is the middle-sized one in the group there.

But it's a qualitative difference as well, I think, [as] a quantitative difference, because you will have a block -- a refrigerator box there blocking the vista from Chinatown."

"On page 71, that's the next text there on Policy 3, Point No. 2, the project would be visible, but not prominent in view of the skyline. I think it would be prominent. It's going to block out, you know -- the building it's blocking out -- it's going to be closer. That's more prominent to me."

"I think you also need a map [figure] that has the views from Portsmouth Square because that is really where people are going to see the project from, not just Powell and Clay. Bring it down, you know, down a step to Portsmouth Square, and maybe even down at the base of Portsmouth Square because Portsmouth Square is at a couple of levels. And let's see what the views look like from there, because I think they are a little bit worse than are indicated there." (Sue Hestor)

RESPONSE

The overall visibility of the project in the skyline, and from other views, is discussed in Visual Impacts, pages 67-70 of the EIR, and illustrated in Figure 22, page 69 of the EIR, and new Figure 22a, page 69a of the EIR and page 168 of this section. The section describes locations from which the project would be seen, including existing buildings from which views would be obstructed. Page 68, second paragraph, last sentence, states that "from Portsmouth Square, the project would partially block views of some buildings to the east...." The EIR, page 71, Table 4, item 2, states that the "project would be visible, but not prominent, in views of the skyline. Together with the adjacent high-rise buildings, the project would define the northern edge of the Financial District, as part of a group of rectangular towers of similar height." This statement describes the relationship of the project to a City policy that "buildings, when seen together, produce a total effect that characterizes the City and its districts."

A new Figure 22a has been added to the EIR, illustrating a view of the project from about the midpoint of Portsmouth Square along its southern boundary at Clay Street and Brenham Place; the new figure is on page 69a of the EIR. Views of the project from the easterly (lower) portion of Portsmouth Square would be partially screened by mature trees located at several levels of the park.

3. SHADOW AND WIND EFFECTS

SHADOW EFFECTS

COMMENT

"On page 74 of the shadow diagrams, I would like a north-south line on it because I found out that there's a misconception about the direction of the streets in the northeast corner. The northeast corner of the City does not have really due east-west streets. The street grade is slightly angled, and it affects shadows. And it would give me the ability to judge the accuracy of the shadow diagrams if I had a little north-south -- whatever you call those arrows -- somewhere on these pages so that I could look a little bit more cynically at the shadow diagrams." (Sue Hestor)

RESPONSE

North arrows have been added to Figures 23, 24 and 25 of EIR, pages 74-76, and are included in pages 169-171 of this section.

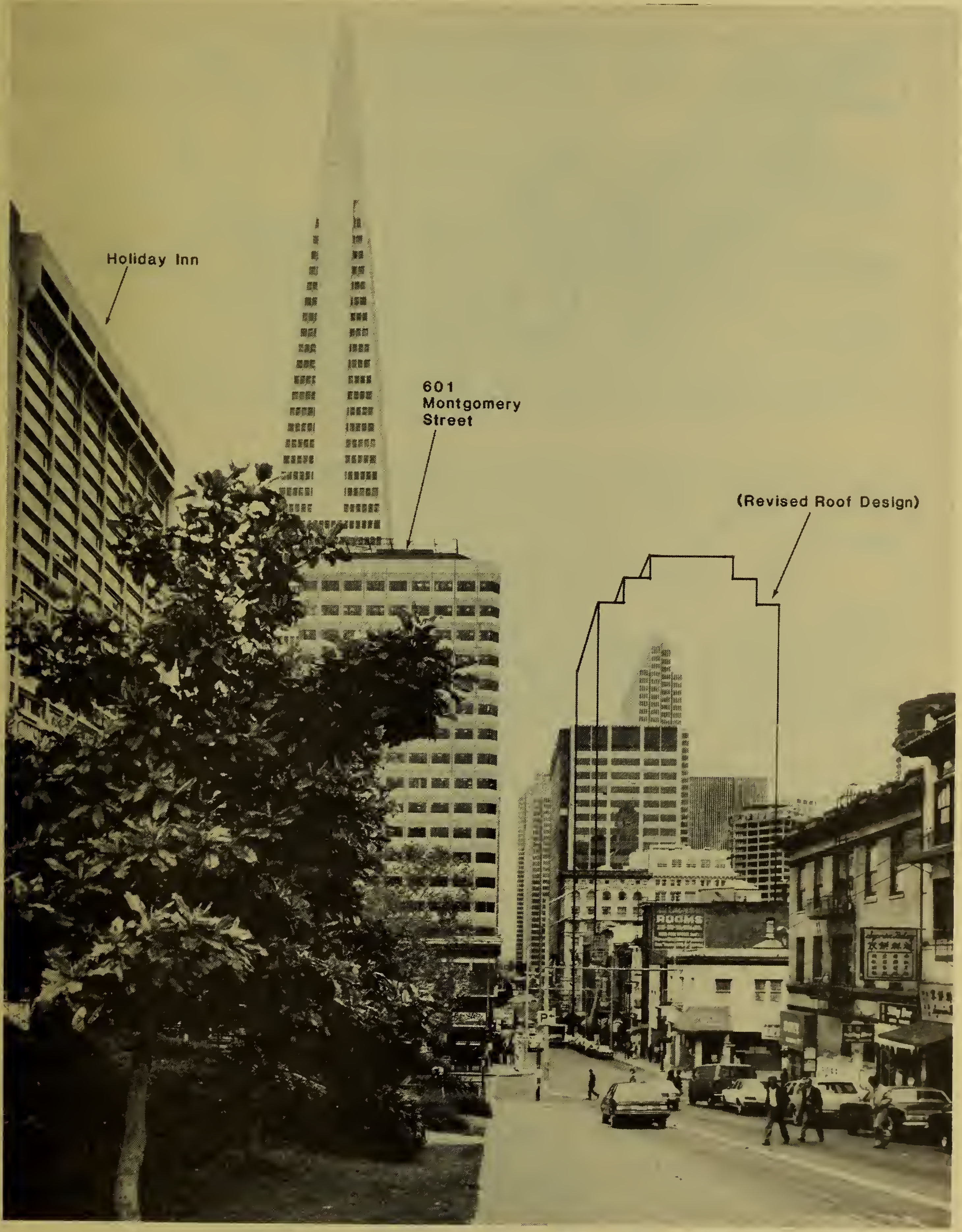
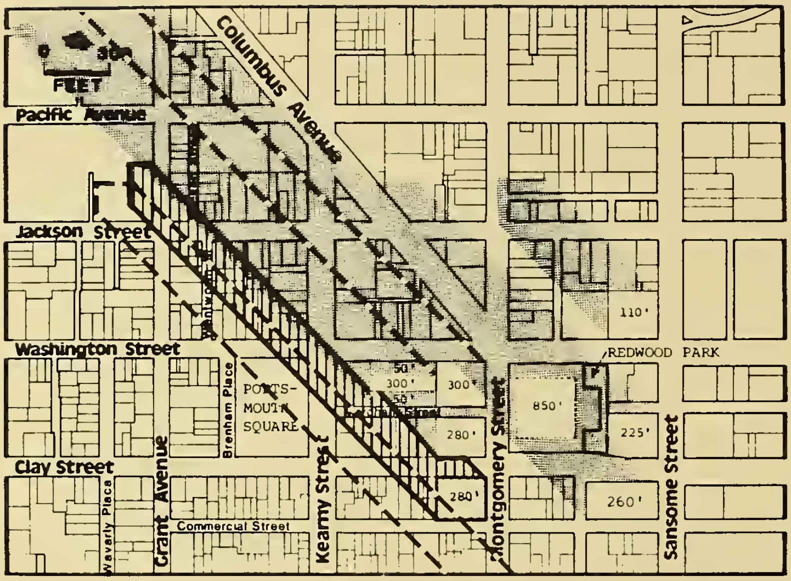
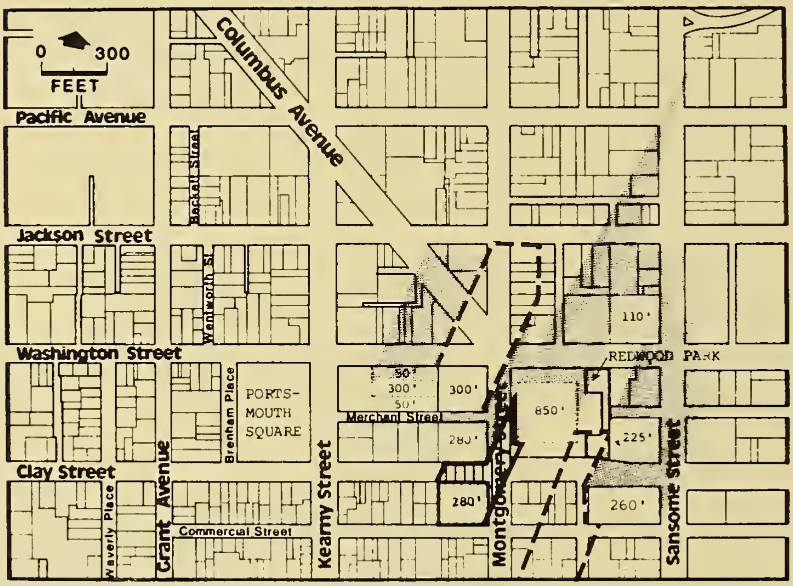


Figure 22a: View from Portsmouth Square (Clay Street near Brenham Place)

SOURCE: Environmental Science Associates, Inc.



8 A.M.

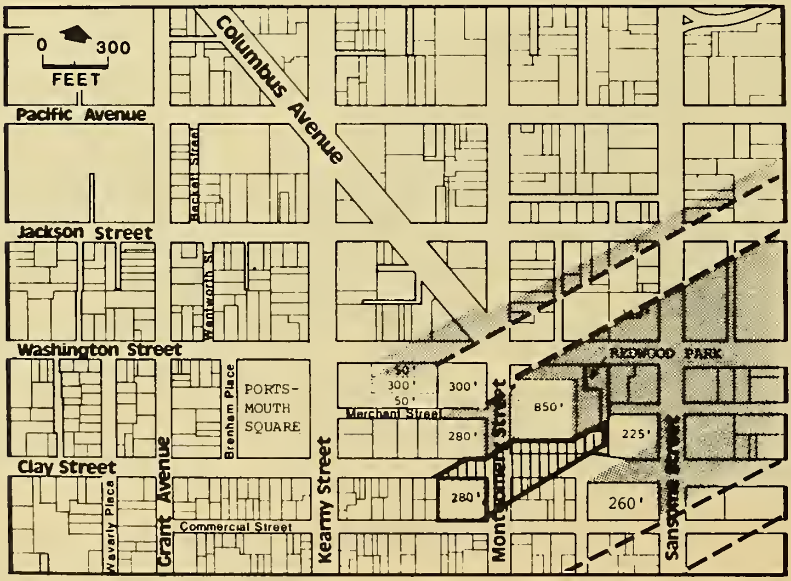


1 P.M.

LEGEND

▒	Existing Shadow
– – –	Under Construction or Proposed Project Shadows
▥	Project Shadow
▨	Project Location

(Standard Time)

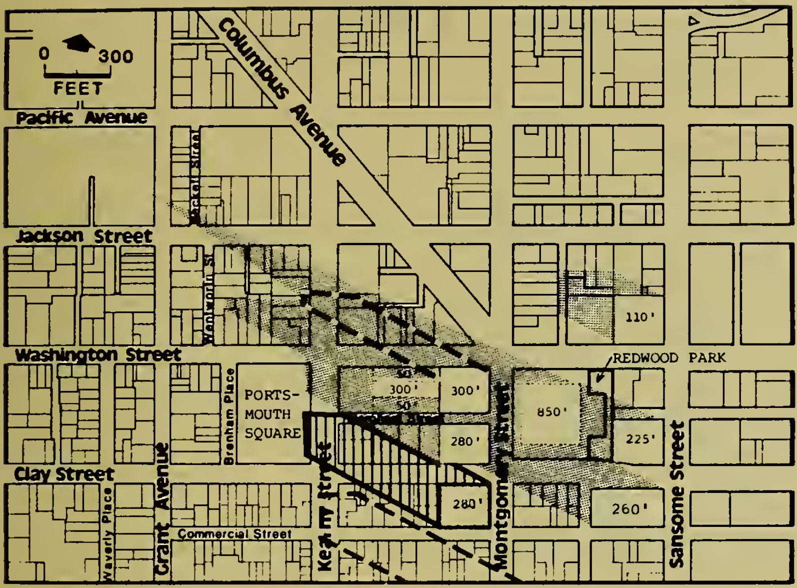


4 P.M.

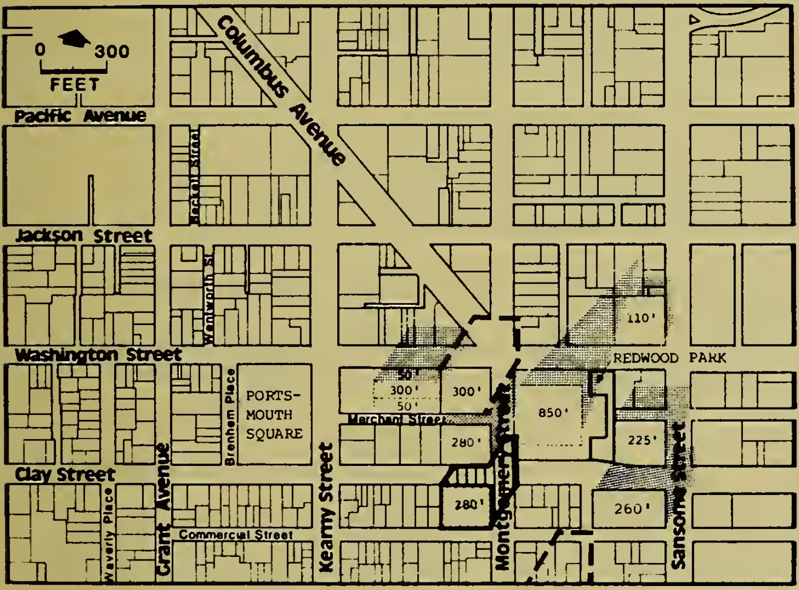
FIGURE 23:

Projected Shadow Pattern in Vicinity of Project – Mid-December

8 A.M.



1 P.M.



LEGEND

▒	Existing Shadow
- - -	Under Construction or Proposed Project Shadows
▥	Project Shadow
▨	Project Location

(Standard Time. September clock times would be one hour later.)

4 P.M.

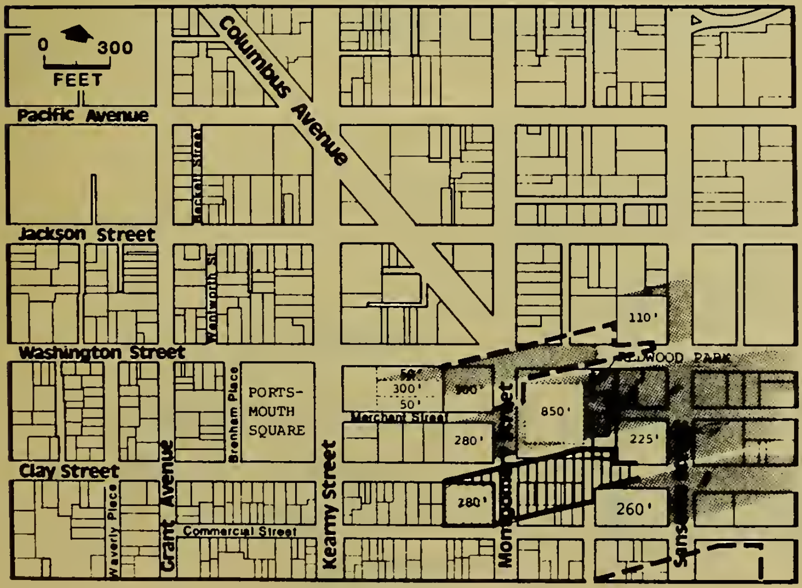
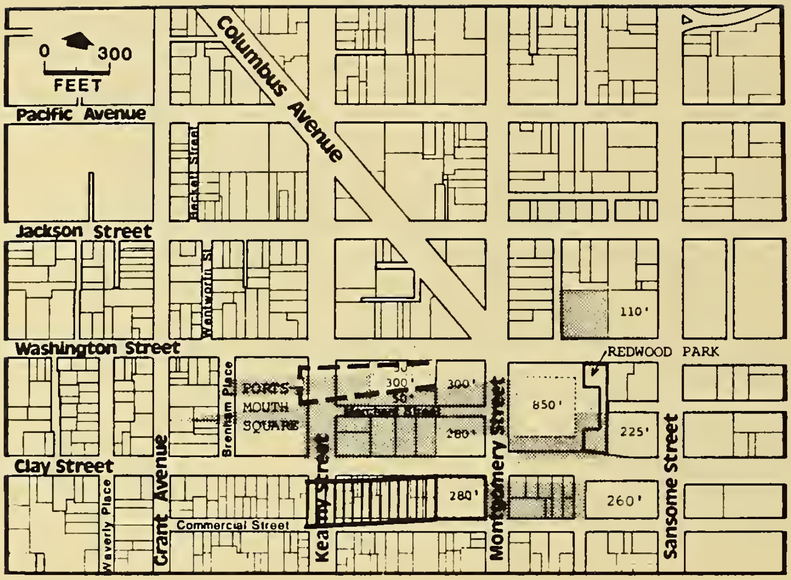


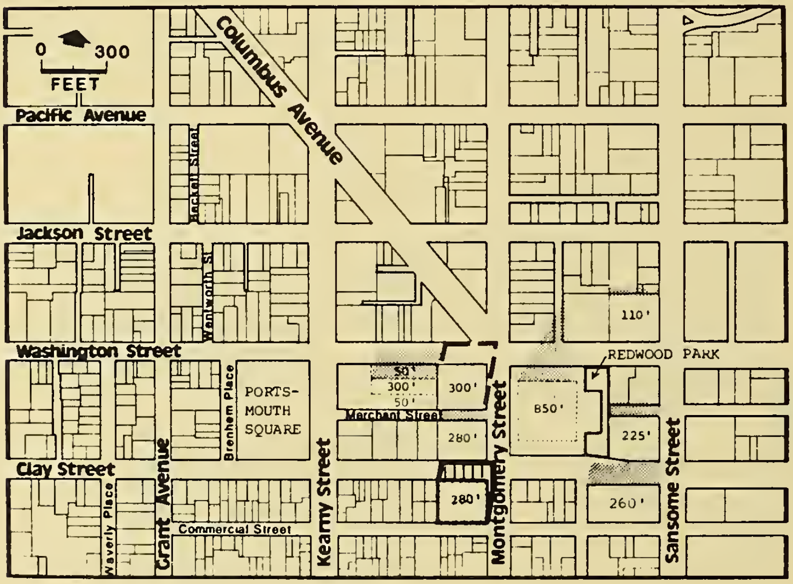
FIGURE 24:

Projected Shadow Pattern in Vicinity of Project – Mid-March and Mid-September

8 A.M.



1 P.M.



LEGEND

▒ Existing Shadow

--- Under Construction or Proposed Project Shadows

▥ Project Shadow

▨ Project Location

(Daylight Savings Time)

4 P.M.

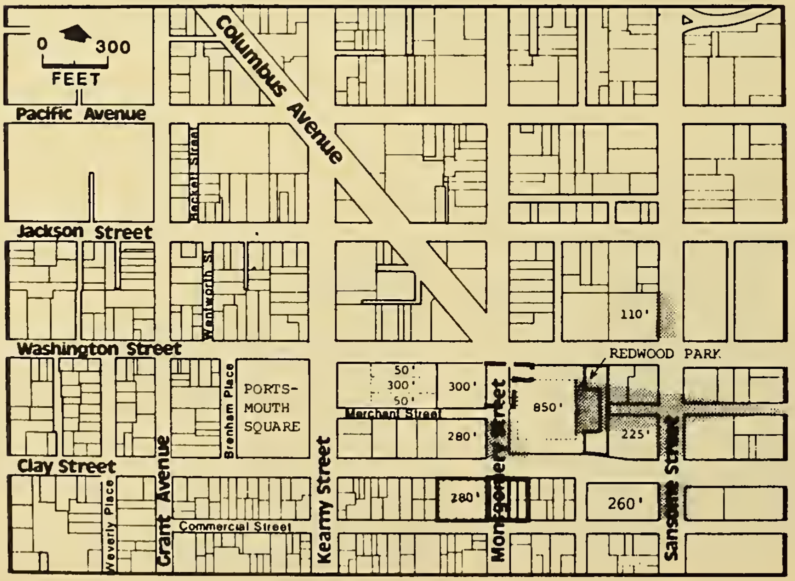


FIGURE 25:

Projected Shadow Pattern in Vicinity of Project – Mid-June

COMMENT

"Also, I think you need shadow diagrams at 7:00 a.m. at all of these... periods. Because you're going to lose a lot of sun in Portsmouth Square. And at 7:00 a.m., there are people in Portsmouth Square. There are people who get up in the morning and do tai chi at 7:00. In fact, there are people there before 7:00 o'clock. And there's going to be a much more severe shadow pattern in the morning, where there is activity, at 7:00 a.m. than you have any indication of here.... And it's a public use of open space that I think is a good, healthy use of open space." (Sue Hestor)

RESPONSE

New Figures 29c and 29d, pages 158c and 158d of the EIR, and pages 174-175 of this section, illustrate shadow patterns of the project (including the proposed revised roof design) at times when the building would cast shadows on Portsmouth Square or Redwood Park. During mid-winter months the sun would rise after 7 a.m. and, thus, the entire area of Portsmouth Square would be in shade. During spring and fall months, the project would cast new shadows on the southerly half of Portsmouth Square, generally between 7 a.m. and 8 a.m. (see Figure 29c). The tai chi class referred to in the comment takes place in the northern area of Portsmouth Square, near the pedestrian bridge to the Chinatown Holiday Inn. This area is shaded at 7 a.m. during spring and fall months by the Holiday Inn and the 601 Montgomery Street building.

During summer months, the project would not shade Portsmouth Square at 7 a.m. Portsmouth Square is and/or would be shaded at this hour by the Holiday Inn, Transamerica Building, and the 601 Montgomery Street Building, and the approved, but not constructed, Montgomery-Washington building.

COMMENT

"On page 74, the shadow studies, we need to study what the new preferred design will do to shadows on Redwood Park, particularly afternoons, and what would have to be done for us to not have any shadow on either the park or Portsmouth Square; [the studies] should be clear as to the effect on Portsmouth Square in the morning; because, as Sue Hestor said, that corner and that side of the Square is used in the morning." (Commissioner Bierman)

RESPONSE

Figures 29c and 29d, pages 158c and 158d of the EIR and pages 174-175 of this section illustrate afternoon shadow patterns of the revised roof design alternative (Alternative 5, the project sponsor's preferred alternative, described on pages 157-158 of the EIR). Shadow effects of this alternative, compared to those of the project, are discussed on page 158 of the EIR) on Portsmouth Square and Redwood Park. The project would have to be about 60 feet tall, compared to 290 feet proposed with the revised roof design, and 282 feet for the project, in order not to cast shadows on Redwood Park after 3 p.m. during mid-December afternoons. The project would shade about 15 percent of Redwood Park at 4 p.m., Standard Time. The existing Bank of America building at 552 Montgomery Street also shades Redwood Park at this time. In mid-March and mid-September, the project would have to be about 230 feet tall in the northern third of the tower, compared to 290 feet with the revised roof design and 282 feet for the project to avoid casting shadows on Redwood Park after 3 p.m. During mid-June, the project would not cast shadows on Redwood Park (see Figure 25, page 76).

The project (and the preferred Alternative 5), would cast substantial new shadows on Portsmouth Square only during spring and fall months before 8 a.m. (see Figure 29c). The project would have to be about 150 feet tall not to cast this shadow.

WIND EFFECTS

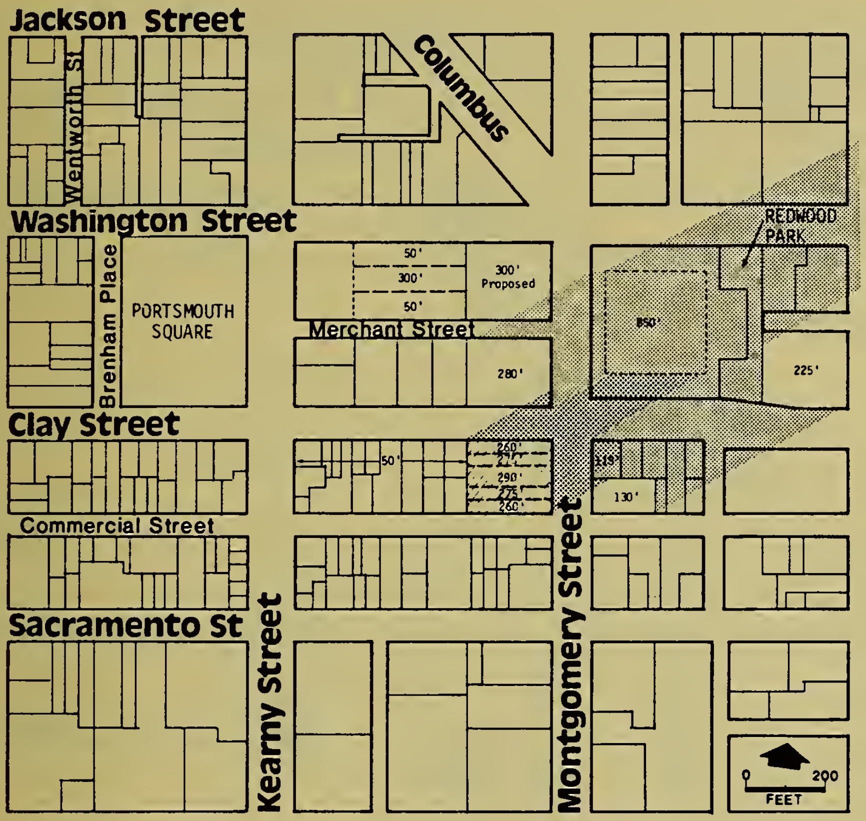
COMMENT

"On page 78, the wind effects. The whole thing was kind of gobbledygook, and I had a hard time following this whole section. And one of the things that would be helpful is where it talks about the west, the southwest, and the northwest winds, if [there] was a little parentheses after each of them that said about how long they run in terms of percent of the year and when. Because winds in the winter are qualitatively -- or in San Francisco's winter, which may not be December. It may be one of our other weird months when we have winter. It may be July. The winds in the San Francisco winter, I'd like to know which...there are. Because the range is different and the impacts are different, and I don't know which comes at what time of the year and whether the west winds prevail 90 percent of the time, from the EIR. And maybe I don't have to worry so much about the southwest or northwest. And it really needs to be in plain language in terms of what is happening there."
(Sue Hestor)

RESPONSE

Existing wind conditions, including speeds, frequency and seasonal patterns, are discussed on page 42 of the EIR. To expand this information, change the fourth full paragraph on page 42 of the EIR to read, "Westerly, southwesterly, and northwesterly winds are the most frequent and strongest winds during all seasons in San Francisco./1/ (In meteorology, a west wind is one that blows from the west.) The most frequent wind direction during most months is westerly; on an annual aggregate basis, west winds blow approximately 52 percent of the time. West winds are also the strongest, averaging about seven mph, exceeding 12 mph six percent of the time. Southwesterly winds are typically the second most frequent (about 14 percent of the time) and second strongest winds averaging seven mph and exceeding 12 mph about two percent of the time. Northwesterly winds have had the second highest average speed during some years, though they generally occur six to eight percent of the time, averaging five mph."

Project wind effects are discussed on pages 77-81 of the EIR. The project would not result in any wind speed ratios greater than moderate. The EIR, page 80, third paragraph, states (the underlined phrase has been added), "Pedestrian discomfort begins to appear at wind speeds of about 12 mph./2/ Pedestrian discomfort from the project would not occur frequently in the project vicinity because, based on wind speed ratios due to the project, free-stream upper-level wind speeds of about 25 to 63 mph for northwest winds and 26 to 50 mph for westerly winds would be required for street-level winds to reach 12 mph. Wind speeds greater than 25 mph occur



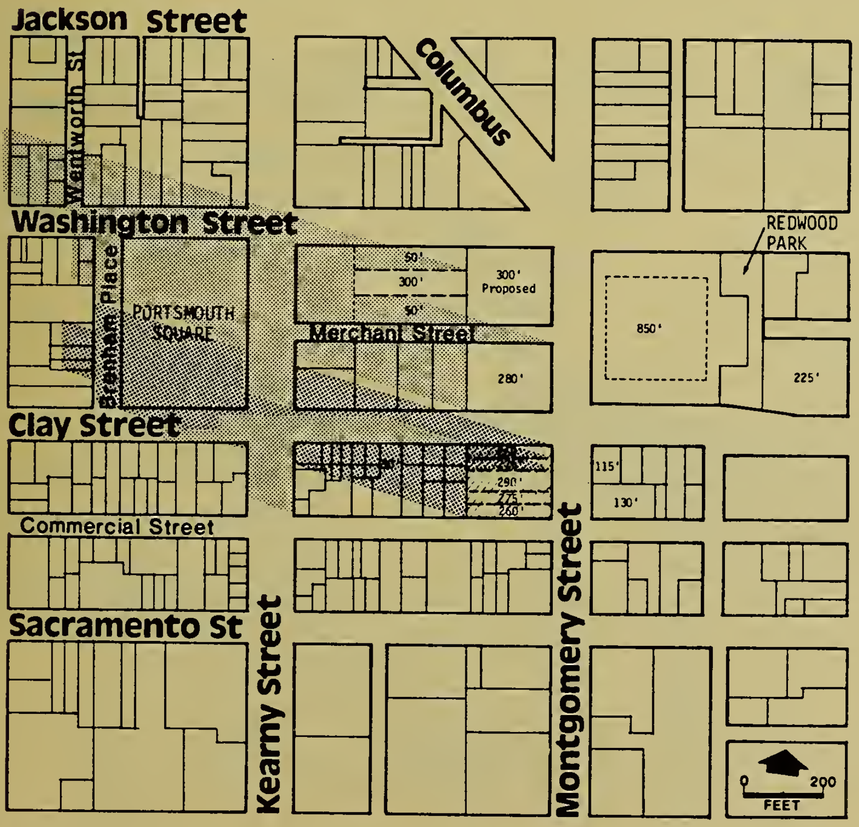
December
4 P.M. Standard Time

LEGEND

▨ Project Location

░ Existing Shadow

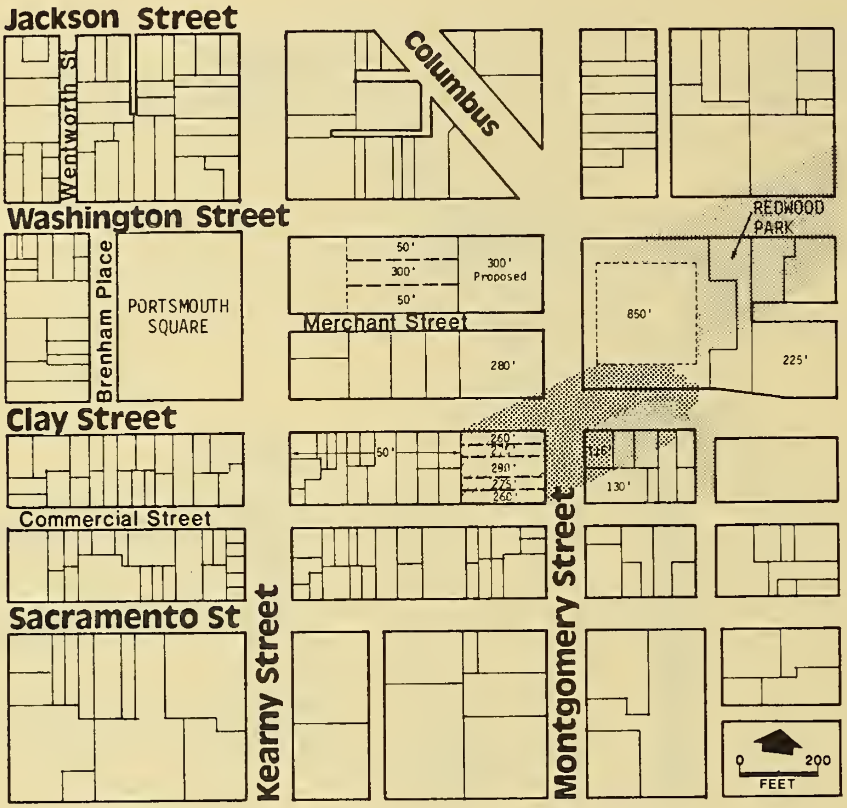
▒ Project Shadow



March
7 A.M. Standard Time
September
8 A.M. Daylight Saving
Time

FIGURE 29c:
Projected Shadow Patterns: Revised Roof Design - December Afternoon; March and September Morning

SOURCE: Environmental Science Associates, Inc.



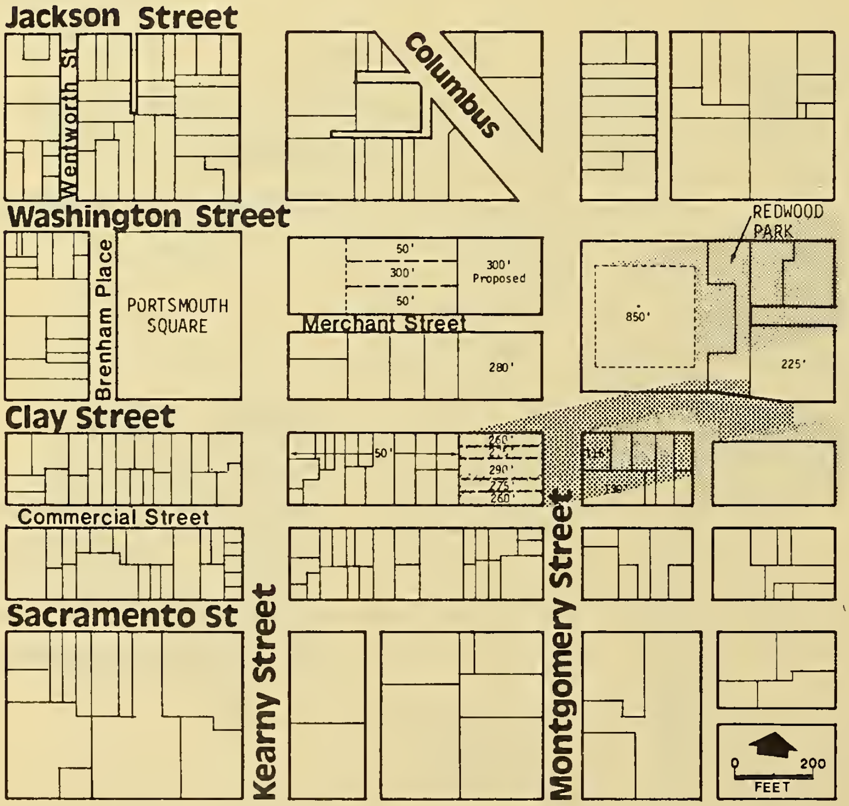
March
3 P.M. Standard Time
September
4 P.M. Daylight Saving
Time

LEGEND

▨ Project Location

░ Existing Shadow

▒ Project Shadow



March
4 P.M. Standard Time
September
5 P.M. Daylight Saving
Time

FIGURE 29d:
Projected Shadow Patterns: Revised Roof Design – March and September Afternoon

SOURCE: Environmental Science Associates, Inc.

three percent and less than six percent of the time for northwesterly and westerly winds, respectively."

NOTES - Shadow and Wind Effects

/1/ Bruce R. White, Ph.D., telephone conversation, January 29, 1982.

/2/ Donald Ballanti, consulting meteorologist, telephone conversation, May 4, 1982.

4. CULTURAL AND HISTORIC FACTORS

EXISTING BUILDINGS ON-SITE

COMMENT

"Page 43, 600-604 Commercial Street is the former Davidson Building. Research by the Landmarks Preservation Advisory Board indicates that the first floor of the building dates from 1851. It housed the general business offices of William D.M. Howard and an individual named Mellus, and the offices of Benjamin Davidson, who established an agency for the Bank of Rothschilds of London. Also, the newspaper printing office of James King of William, editor and publisher of the San Francisco Evening Bulletin, was located in the building. The building was remodelled in the 1960's for use by the Bank of Canton. The original interior features, including a groin vaulted ceiling in the main banking hall and vaults in the basement, may still exist behind the later alterations. [Submitted with Notes for the Case Report: Davidson Building, which are on file at the Office of Environmental Review]

"The Board also felt there should be more discussion of the other buildings on the project site, including but not limited to construction dates and materials.

"Page 47, Figure 20: Note that buildings 5, 33, 34, 35, 36 and 38 are designated landmarks." (Jonathan Malone)

RESPONSE

The following paragraph is added on page 46, following paragraph one:

"600-604 Commercial Street (at the corner of Commercial and Montgomery Street, now remodeled as part of the 555 Montgomery Street Building) is the former Davidson Building. Research by the Landmarks Preservation Advisory Board indicates that the first floor of the building dates from 1851. It housed the general business offices of William D.M. Howard and an individual named Mellus, and the offices of Benjamin Davidson, who established an agency for the Bank of Rothschilds of London. Also, the newspaper printing office of James King of William, editor and publisher of the San Francisco Evening Bulletin, was located in the building. The building was remodelled in the 1960's for use by the Bank of Canton./5A/ The original interior features, including a groin vaulted ceiling in the main banking hall and vaults in the basement, may still exist behind the later alterations. The Davidson Building was reviewed but not recommended for landmark designation by the Landmarks Preservation Advisory Board in 1970.

"The rest of the 555 Montgomery Street address includes remodeled portions of three structures. Lot 1, at Montgomery and Clay Streets, includes a concrete structure built in 1920. Lots 2 and 3 include concrete structures built in 1907 and 1908, respectively (see Figure 12, Project Site and Vicinity, page 33, for lot numbers). The original appearance of this block front has been substantially altered by Bank of Canton remodelling (see Figure 16, page 39).

"619-623 Clay Street is a concrete structure built in 1912. The facade is a three-part vertical composition, with a decorative belt course above the ground floor, four stories of rows of five windows with projecting sills and pediments, and a overhanging cornice with decorative brackets at each end of the facade (see Figure 17, page 40).

"631 Clay Street is a concrete structure built in 1926. The four-story structure has multiple-paned industrial-type windows, with simplified projecting sills and cornice. The ground floor appear to have been substantially remodelled. (See Figure 18, page 41)./5B/

Page 48 of the EIR, insert the following footnotes after Footnote /5/:

"/5A/ Jonathan Malone, Secretary, San Francisco Landmarks Preservation Advisory Board, letter, April 29, 1982."

"/5B/ Building construction dates and material data are from records in the San Francisco Assessor's Office."

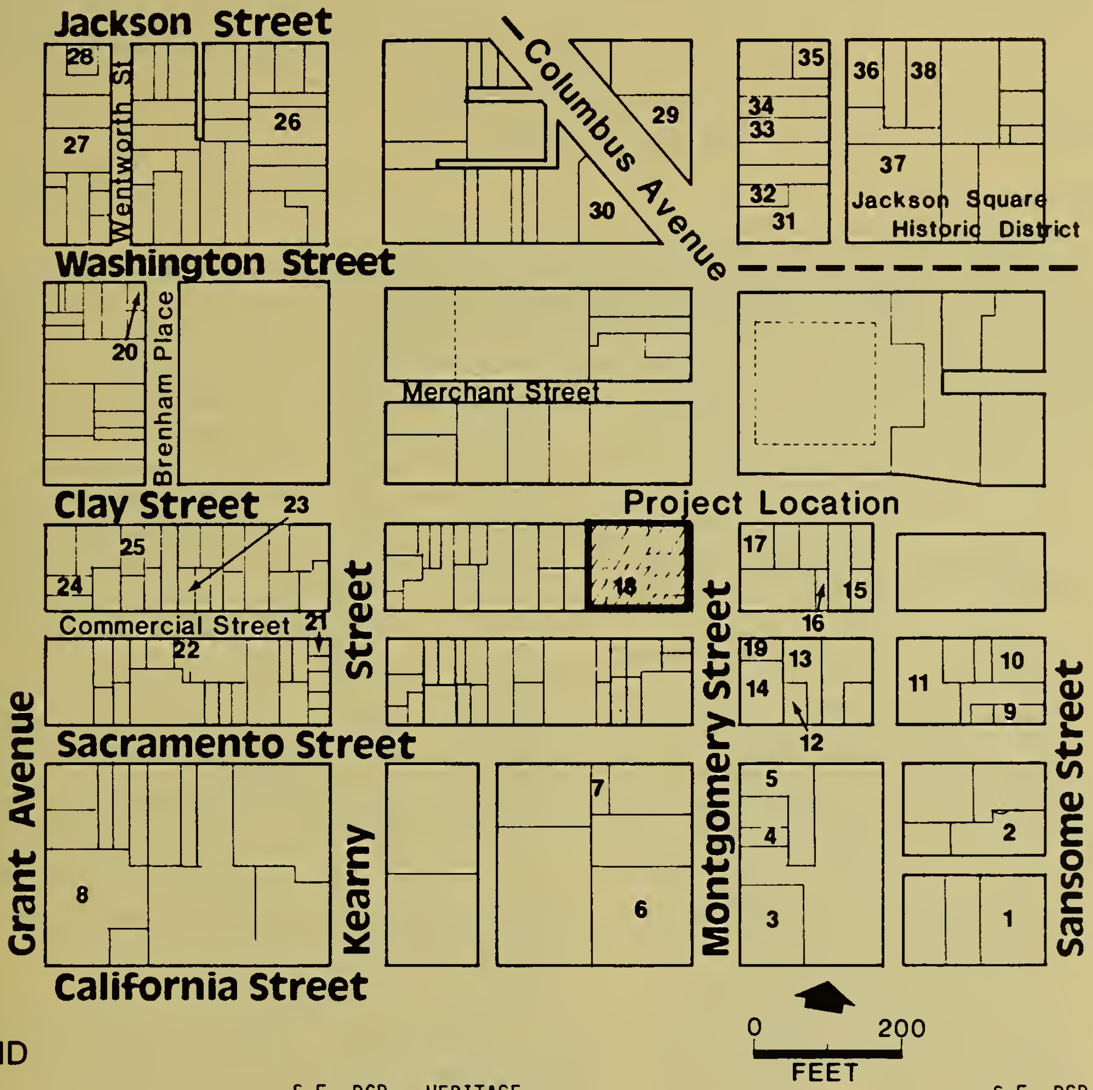
Figure 20, page 47, has been revised to indicate the cited landmark buildings, and is included on page 178 of this section.

COMMENT

"The DEIR notes, correctly, that the proposed project will affect the State Registered Landmark No. 87, 'Site of the First U.S. Branch Mint in California'. This plaque commemorates an earlier structure which was demolished in 1874. Because the building commemorated by the plaque no longer exists, the proposed Bank of Canton construction cannot affect any of the qualities which make the site eligible for landmark designation. The project may, however, require the removal of the bronze Landmark plaque at 608-610 Commercial Street. This plaque is the property of the State of California and as such is under the jurisdiction of the California Department of Parks and Recreation. We ask that the Office of Historic Preservation be notified of any action that may affect the plaque." (Dr. Knox Mellon)

RESPONSE

The project would restore and incorporate the Old Sub-Treasury Building, on the site of the first U.S. Branch Mint, as discussed on pages 43-44 of the EIR. The plaque commemorating the California Landmark No. 87 would neither be removed nor disturbed as a result of the project.



LEGEND

	BUILDING[1]	S.F. DCP INVENTORY	HERITAGE SURVEY
1	400 California St.+	5	A
2	343 Sansome St.	NR	B
3	400 Montgomery St.*	4	A
4	440 Montgomery St.+	4	A
5	460 Montgomery St.+	3	A
6	405 Montgomery St.	NR	A
7	615 Sacramento St.	1	B
8	680 California St.	4	NR
9	401-405 Sansome St.	3	C
10	415-429 Sansome St.	NR	B
11	222 Leidesdorff St.	NR	B
12	568 Sacramento St.	NR	B
13	569 Commercial St.	3	A
14	500 Montgomery St.	4/5	B
15	554 Commercial St.	NR	A
16	564-566 Commercial St.	1	B
17	552 Montgomery St.	4	A
18	608 Commercial St.*+	3	NR
19	520 Montgomery St.	NR	B
20	743 Washington St.	3	NR
21	625 Kearny St.	3	NR
22	755 Commercial St.	3	NR
23	748 Commercial St.	3	NR
24	738 Grant Ave.	3	NR
25	759 Clay St.	3	NR
26	833 Kearny St.	3	NR
27	930 Grant Ave.	3	NR
28	675 Jackson St.	3	NR
29	701 Montgomery St.	4	NR
30	1 Columbus Ave.	3	NR
31	700 Montgomery St.	3	NR
32	710 Montgomery St.	3	NR
33	722 Montgomery St.+	4	NR
34	728 Montgomery St.+	3	NR
35	473 Jackson St.+	5	NR
36	451 Jackson St.+	5	NR
37	580 - 584 Washington St.	5	NR
38	431-441 Jackson St.+	4	NR

NOTES:

[1] Includes only those buildings on the San Francisco City Planning Commission's list of architecturally and/or historically significant buildings in the Downtown, May 29, 1980. See Appendix B for a discussion of surveys and ratings.

+City landmark
*State landmark

NR: Not rated.

FIGURE 20: Architectural and Historic Resources in Site Vicinity

SOURCE: Environmental Science Associates, Inc.

ARCHITECTURAL ELEMENTS OF THE SUB-TREASURY

COMMENT

"On page 65, I was confused in a couple of places where they talk about architectural elements being in the museum. I'm not sure what architectural elements are coming in and where they're coming from. And I think I understand that they are going to expose some of the structure for the museum as part of the museum, but where are the architectural elements that they are talking about from the Sub-Treasury that are going to be added in and exposed? Or are they all just going to be exposed and none of them going to be added in? Where are they going to come from, from what part of the building? Or are they, you know, saved from a previous demolition? It just isn't clear, and it comes through in about three places where they talk about that museum." (Sue Hestor)

RESPONSE

Page 26 of the EIR states that "the museum would display original elements of the structure, including brick walls, a decorative cast-iron column, the steel beam and corrugated iron floor system, and the basement-level coin vault." Page 81 states that "The museum would also include exhibits of the interior elements of the structure, including the coin vault, decorative columns, and interior brick walls. The basement coin vault would be made visible from the main floor, and portions of the steel beam and corrugated iron arch floor system would be exposed."

Add the following to the second full paragraph on page 26 and after the second sentence of the last partial paragraph on page 81 (Revised Figures 3 and 4, pages 19-20 of the EIR and pages 180-181 of this section, indicate locations of architectural elements discussed):

"Except for proposed reproduction of one decorative column, removed during post-earthquake reconstruction of the Old Sub-Treasury Building, all these architectural elements are now present in the structure; these elements would remain in place. Figures 3 and 4 indicate locations of the coin vault and the decorative columns. A portion of the main floor above the coin vault would be exposed to display the floor system."

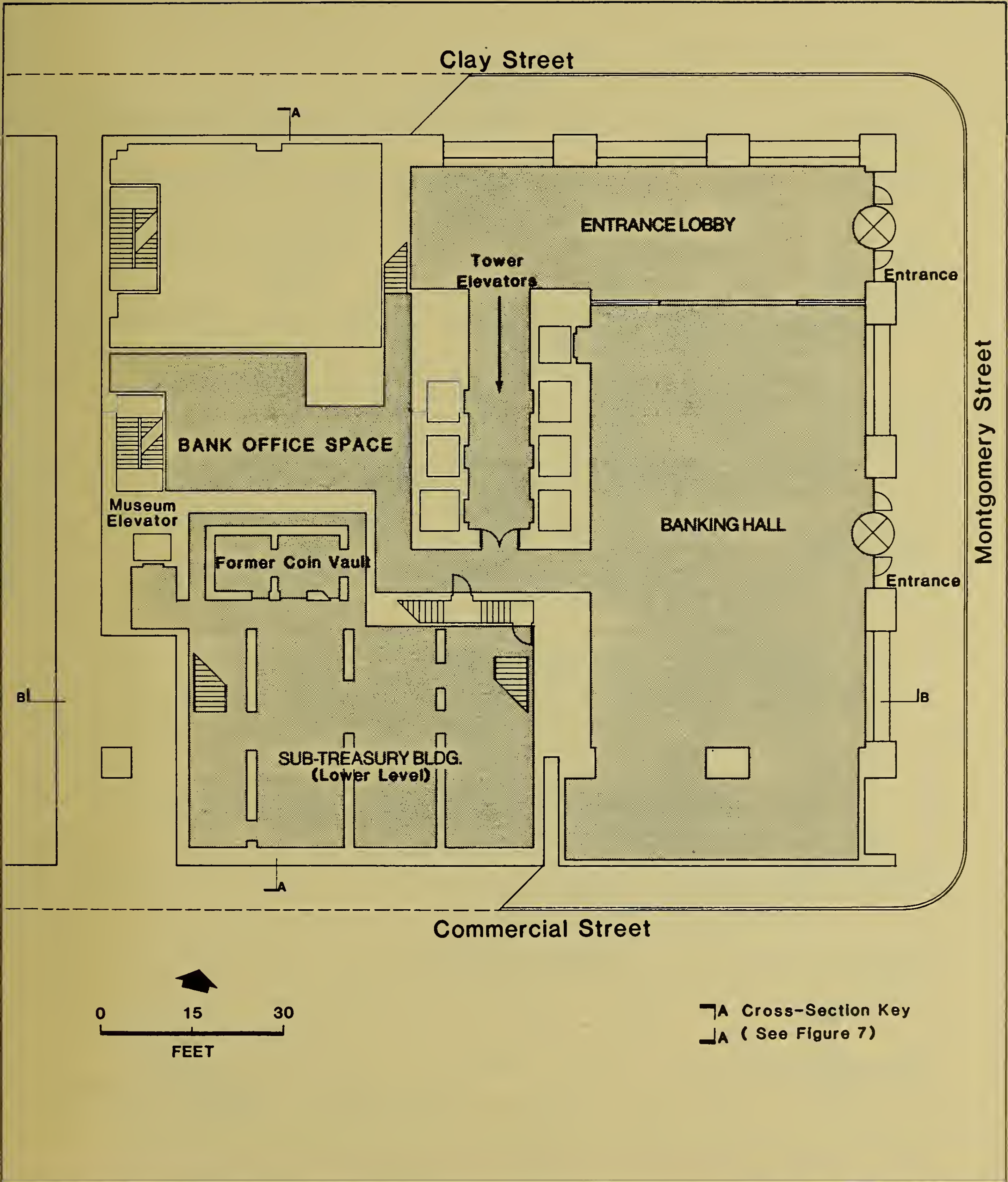
PACIFIC HERITAGE MUSEUM OPERATION

COMMENT

"I'm with the American Asian Bank, which is across the street from the Bank of Canton. I read with great interest the project sponsor's proposal to preserve and restore the landmark building on the site of the Old U.S. Mint for public use as the Pacific Heritage Museum.

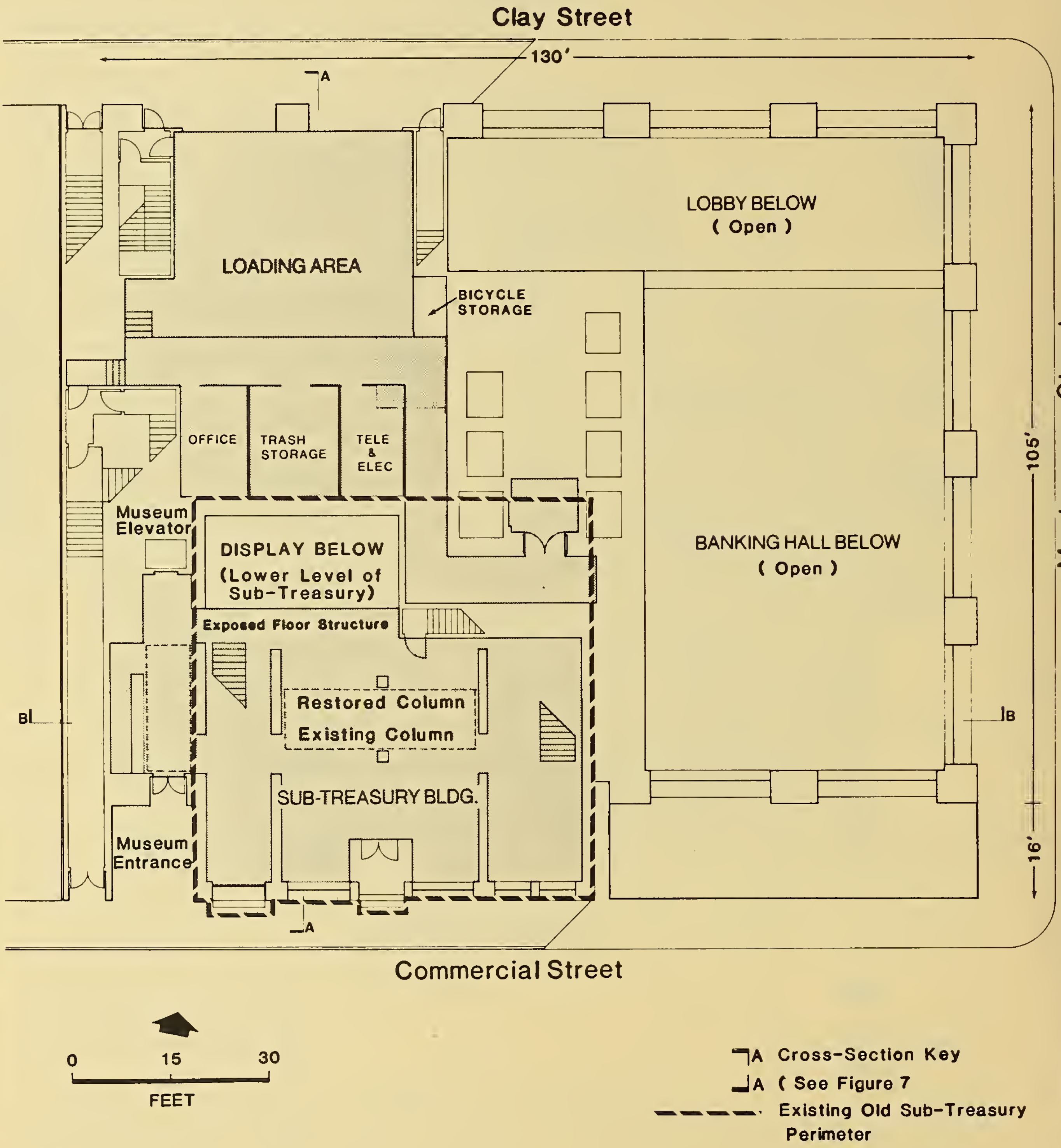
"The Financial District lacks cultural and recreational facilities. And the proposed Pacific Heritage Museum is a most welcome addition.

"In addition, the theme of Pacific Heritage is most appropriate with a multicultural city such as San Francisco. However, the Environmental Impact Report contains very little detail on the proposed museum. It does not



SOURCE: Skidmore, Owings & Merrill

FIGURE 3: Montgomery Street Level Plan (Revised)



SOURCE: Skidmore, Owings & Merrill

FIGURE 4: Sub-Treasury Building and Loading Level Plan (Revised)

mention, for example, what types of exhibits will be displayed in the museum. How is the museum going to be financially supported? Who will run the museum?

"I have no doubt that the project sponsor has the best intentions, but I would like to see a more detailed presentation of the plans for the museum in the next revision of the Environmental Impact Report." (Sherman Wang)

RESPONSE

As stated on page 15 of the EIR, the museum "would include exhibits on the art, culture and history of California immigrant groups from the Asia and Pacific regions, and on the history of the site and structure." The inaugural exhibit is planned to be a collection of late 19th century overseas Chinese ceramics. Dating from the 1870's and 1880's, these artifacts were recovered from several urban renewal sites in San Francisco, including the Moscone Center area. Examples of other potential exhibits include: "A History of the Chinese in California," "Japanese Society at the Time of Commodore Perry," "History of Chinese-Style Architecture in California," "Japanese-American Art, 1941-1945: Art in Captivity," "Development of Railroads in California." Possible exhibitions involving other Pacific peoples such as Filipinos and Koreans would also be investigated. The museum would also arrange exchange exhibitions with museums in the United States and worldwide./1/

The museum would also include permanent displays related to the history and significance of the Branch Mint site and Old Sub-Treasury Building. These would include documents, original plan photographs, coins, and artifacts pertinent to the site's role in San Francisco. As described on page 81 of the EIR, the museum would display interior architectural elements of the structure.

The Bank of Canton of California would provide continuing financial support for the operations of the Pacific Heritage Museum. No use of public funds for museum operation is anticipated. Other San Francisco institutions and organizations, such as the Chinese Historical Society, the Chinese General Chamber of Commerce, the Golden State Sanwa Bank and the Sumitomo Bank of California, have expressed interest in and support for the museum concept, and might sponsor specific exhibitions.

The museum would be supervised by an Advisory Board whose members would be drawn from among citizens of San Francisco and the Bay Area. The Advisory Board is in the process of being filled. Those who have already accepted invitations to serve on the Advisory Board include:

Chairman:	Mr. Lim P. Lee, former Postmaster General of San Francisco
Vice Chairman:	Mr. Nimei Akamatsu, President, Sumitomo Bank of California
Secretary and Treasurer:	Mrs. Sally Wen, Chairperson, American Hawaii Tours
Members:	Dr. Haruo Aoki, Department of Oriental Languages, University of California, Berkeley
	Dr. Albert E. Dien, Professor of Chinese, Stanford University

The Honorable March Fong Eu, Secretary of State of California

Dr. Michael Keran, Senior Vice President and Director of Research, Federal Reserve Bank of San Francisco

The Honorable Harry W. Low, Judge of the Superior Court, San Francisco

Mr. H. K. Wong, past President, Chinese Historical Society of America/1/

COMMENT

"On page 66 when it talks about the museum, also, will it be open on weekends? I would hope that if this is considered to be a major asset for the community and major mitigation measure, that the museum would be open when people from San Francisco that don't work downtown can go to it. And that includes, at the absolute minimum, weekend hours and I think some evening hours as well. It sounds like a neat museum, and I'd like to go there. But I normally am not down in that part of the City with lots of spare time during the week. And I think if it's a museum, you should have some hours in it." (Sue Hestor)

RESPONSE

Operating hours for the Pacific Heritage Museum have not been determined at this time. The Bank of Canton anticipates that the museum would be open on weekends. Evening hours might be established for certain exhibits.

NOTE - Cultural and Historic Factors

/1/ A Proposal for Pacific Heritage Museum to be Housed in Old U.S. Subtreasury Building, Bank of Canton of California (no date).

5. EMPLOYMENT, HOUSING, AND FISCAL FACTORS

EMPLOYMENT

COMMENT

"I found it very interesting that when you look at the net square feet per employee on this table, the existing uses and employment, that these figures don't correspond at all to the figures that the Planning Department is using on average number of square feet per employee. 619 Clay Street, the average square feet per employee is 135 square feet; 623 Clay Street, 169 square feet; 604 Commercial, which is higher, at least the AMROC part of it is, 363; and Bank of Canton is 307, and they're going up to 448 square feet per employee. MBT uses 233. So people have been adapting themselves to much tighter areas, at least in this area. And presumably their office costs are going to go up astronomically if they go up to the norm. So maybe they will adjust themselves to tight space where they relocate. And that means that your figures in terms of housing mitigation are skewed by that, which I'm raising a question on." (Sue Hestor)

RESPONSE

The floor area a business allocates to each employee depends on a number of factors, including type of business and the amount of space available. In the absence of specific information on tenants that would occupy the proposed project, other than the Bank of Canton, an estimate of the number of office employees was made assuming 250 gross square feet per employee. This figure is recommended in Robert W. Burchell and David Listokin, 1978, Fiscal Impact Handbook, page 138. The Department of City Planning uses this ratio in estimating new office employment in San Francisco./2/ Existing businesses on the site use an average of 258 net square feet of space per office worker (see Table 5, page 84 of the EIR), and about 310 gross square feet per employee. If the average area per employee in the existing buildings were considered representative of the space requirements of the office tenants which would occupy the proposed project, then use of the 250 gross square feet per office employee factor would yield a higher estimate of project employees than might actually occur. If this were the case, the housing demand based on 250 gross square feet per office employee would also be higher.

COMMENT

"Explain in plain language...and this would be on page 87....This is from your other EIR's...that only five percent of the jobs generated by this project would go to existing San Francisco residents -- the incremental jobs, not the Bank of Canton current employees -- and that 35 percent would be people who would move into San Francisco, displacing existing residents, in part through bid-up of housing costs, in part because the people that are being displaced can't find jobs that are appropriate to their skills. That has been in the other EIR's, and I think you need to have it here so that you're not deluding yourselves that you are creating this massive amount of jobs for San Franciscans that are unemployed. Put it in here, match the existing skills, do a jobs-needs analysis on existing San Francisco residents, and then tell us how you are affecting housing because how you're affecting housing is through gentrifying housing, and that's something that should be in this EIR." (Sue Hestor)

RESPONSE

The labor pool from which project employees would be drawn includes the entire San Francisco Bay Area. Some, but not all, new employees would be in-migrants to the region. Employment opportunities for City residents, as well as the regional labor force, would expand due to the project and other cumulative downtown development. On the basis of the information contained in 101 Montgomery Street Final EIR, (pages 289-309) precise quantification of the number of jobs generated by downtown office development that go to existing San Francisco residents is not possible because adequate data is not available. As a best estimate, between five and ten percent of people newly employed in San Francisco are expected to be San Francisco residents before getting their jobs. "These are people who either would have not worked or have worked outside San Francisco before getting their job in San Francisco." (101 Montgomery Street Final EIR, page 301). The project would most likely provide jobs to

San Francisco residents who are entering the work force, such as young people and re-entry women, as well as residents currently employed elsewhere or presently unemployed but previously employed in office work. It is not expected that employment opportunities in the project would be available for the hard-core unemployed.

OFFICE SPACE

COMMENT

"I don't like the use of the word "demand" in this section starting on page 83. What is demand? I mean is that need? I need office space. Am I demanding it at $40 a square foot? No. I can't afford $40 a square foot. So what is demand? Because that affects how much office space should be projected and how much should be built for. And when I look at page 86 and it concludes that there is the great unfulfilled demand, I would refer you to ask Jim Bronkema about Embarcadero 4. How much of that is leased? To my understanding, they're have a slightly difficult time with Embarcadero 4." (Sue Hestor)

RESPONSE

San Francisco has one of the lowest vacancy rates for office space in the United States; the March 1982 vacancy rate for office space in the downtown was 0.8 percent (Coldwell Banker, Office Vacancy Index of the United States, March 31, 1982. The index is a quarterly report of vacancies in office buildings in downtown areas of 23 major U.S. cities). This low vacancy rate indicates that there continues to be a large demand for office space in San Francisco, which results in high market values for available office space in both older and newer buildings. Four Embarcadero Center has a less than one percent vacancy rate; space is available on a sublease basis./3/

COMMENT

"On pages 83 and 84, I was looking for 539 Bryant in this. This is the displacement issue of the current property. You have had before you, and it has been continued, the issue of 539 Bryant Street, which is tenants in one of these buildings that is being displaced. It's MBT Associates, 631 Clay and 604 Commercial. They're moving down to 539 Bryant with a new building -- pardon me -- with a conversion because of this project. It belongs in the EIR. There is a direct connection between this project at Montgomery and Clay and putting pressure in displacing industrial uses in the M-1 District. And it needs to be in here because I make the connection on 631 Clay." (Sue Hestor)

RESPONSE

MBT Associates purchased a vacant warehouse structure at 539 Bryant Street for conversion to offices for its architectural firm. A Final Negative Declaration was approved by the City Planning Commission on May 13, 1982 with a finding that the MBT project could not have a significant effect on the environment (Resolution 9393, May 13, 1982). The City Planning Commission also reviewed the proposed conversion under its discretionary review process and approved the MBT proposal with conditions. The proposed office uses are permitted as a principal use by the Planning Code in an M-2 (Heavy Industrial) Use District.

CUMULATIVE OFFICE DEVELOPMENT

COMMENT

"On page 33, you have a map of the surrounding area. I think that map is too limited -- when you turn the page over -- limited in area. You have a much broader area. And I don't think that you have the full scope of what is going on in terms of activities on that map...

"You are missing on the map..., the addition at 550 Kearny Street.... It is under construction right now. And you have the 580 California proposal, for which a draft initial study hit the decks last week. And if you had the boundaries expanded just a tiny bit, you would pick up 353 Sacramento Street, which is a block away; 901 Montgomery Street, which is a block away from these boundaries on this map on page 33; 1000 Montgomery, which is two blocks away; 50 Osgood, which is about a block and a half away; and you would also pick up -- I have forgotten the exact address, but the building behind the Royal Pacific Motel, which is the Pacific Street office building that was before this Commission about a month ago.

"I think the boundaries being as narrow as they are give you a distorted picture of how much is going on, and there is a lot of activity going on around Chinatown. And you would have a much smaller visual representation of the pinchers that are happening around Chinatown in terms of loss of residential units, loss of commercial uses to banks and all of the other things that -- we all have been here before you all in the last two years around Chinatown, and I think that map needs to be...bigger...in terms of taking in more area so that you have all the peripheral projects, including the ones I have left out. Just because I forgot it, Doesn't mean the staff shouldn't pick it up." (Sue Hestor)

RESPONSE

Figure 12, Project Site and Vicinity, page 33, and Figure 13, Land Use in the Vicinity of the Project Site, page 34, of Section III, Environmental Setting, of the EIR illustrate existing activities and land uses in the project area, rather than potential development that may occur if projects in the review process were approved. Pages 64-65 of the EIR explain that the project would be consistent with Comprehensive Plan and Planning Code use designations for the site and with nearby Financial District uses. Page 65, paragraph four, last sentence, states that the project "would contrast with residential-retail land use in Chinatown to the west." (The response to the comment below further discusses cumulative downtown development effects.)

COMMENT

"A couple of pages -- 49, 85, 99, and 203, the discussion of downtown office growth. You do not have the specifics in here that I would find helpful.

"I specifically refer to, and ask you to incorporate, the document that is in my big lawsuit labeled SH-1, which is my reconstruction and, hopefully, perfection of the document that was released by your staff on October of office buildings in line. Because, throughout these sections, you are using real low figures for how much is in the pipeline. I think the real figure is around 39 million square feet. And you should be looking at the aspects of that growth, not a marked down figure, for the purposes of looking at impacts.

"So I would ask you to incorporate my document,...and justify why you are not using my figures, why you are using yours. I would like to find out." (Sue Hestor)

"Page 85 under office, it should include the proposed buildings as well as just those that are approved and under construction." (Commissioner Bierman)

RESPONSE

Section III., Environmental Setting, page 49, and Section IV., Environmental Impact, page 85 of the EIR indicates the number of square feet of office space approved or under construction as of November, 1981. This was considered "setting" information. This cumulative total is referred to on page 85 and in Table C-1, page 278.

Office space completed through 1980 as shown in Table C-1, page 278, Column 1, includes all major office buildings completed in San Francisco since 1959, plus the base amount of office space measured before that time, all listed on various Department of City Planning records. These buildings are all occupied and included in the baseline measurements made for this EIR. These baseline measurements are not based on square footages shown on Table C-1 but on actual counts (e.g. traffic on citystreets) or instrument measurements (e.g. air quality) and take into account activities resulting from existing occupied office space.

Projects included in the portion of Table C-1, Column 1, labeled "approved" and "under construction 82-84" are listed in appendices to the December 18, 1981, memorandum from Dean Macris to the City Planning Commission. These two lists are included on the Tables C-1a and C-1b, page 188 of this section, and added to the EIR as page 278a.

Since the DEIR was published, the total number of projects under review has increased to about ten million square feet. However, several million square feet of this total are in the process of revision. They are not included in cumulative analyses in the EIR. The overall cumulative total (approved, under construction, or proposed) is about 20 million square feet. On page 49 of the EIR, the following is added to paragraph one:

"Another approximately 11 million square feet of office space is under consideration in the Department of City Planning as of April, 1982. If all were built as proposed, a total of about 20 million square feet of office space would be added to the downtown area. Another two to three million square feet are under early review or have shown no activity for eight months or more and have not been included in cumulative analysis."

Other space included in projects on Ms. Hestor's list that might be proposed in developments such as the Rincon Point/South Beach Redevelopment Area, Rincon Hill or Southern Pacific's proposed Mission Bay Project, is neither definitive nor yet under review, although some proposals have been discussed with Department staff. These projects are not included in cumulative analyses in this EIR because building locations, sizes, uses and other aspects could change markedly during the planning/environmental review process or such project could be either withdrawn of disapproved by the City.

TABLE C-1a: MAJOR OFFICE BUILDINGS UNDER CONSTRUCTION AS OF MAY, 1981

Assessor's Block	Project Name	Office (Gross Sq. Ft.)
164	936 Montgomery	25,000
167	Golden Gateway III	100,000
168	Golden Gateway II	100,000
237	353 Sacramento	287,000
263	101 California	1,300,000
288	101 Montgomery	278,000
292	Crocker National Bank	770,000
312	50 Grant (Ransohoff's)	90,000
762	Opera Plaza	50,000
3708	25 Jessie	111,000
3709	Five Fremont Center	843,000
3712	Federal Reserve Bank	653,000
3718	Pacific Gateway	548,000
3735	Gift Mart	340,000
4991	S.F. Executive Park II	105,000
	TOTAL	5,600,000

SOURCE: Department of City Planning

TABLE C-1b: MAJOR OFFICE BUILDINGS APPROVED AS OF NOVEMBER, 1981

Assessor's Block	Project Name	Office (Gross Sq. Ft.)
161	Mirawa Center/Grant and Pacific	84,000
163	901 Montgomery	82,000
166	222 Front	141,000
166	750 Battery	105,000
239	456 Montgomery	223,000
240	550 Kearny	71,000
271	453 Grant	37,000
289	One Sansome	610,000
351	50 UN Plaza	60,000
3702	1155 Market	144,000
3705	Pacific III Apparel Mart	332,000
3715	141 Steuart	80,000
3717	101 Mission	214,000
3738	315 Howard	389,000
3803	China Basin Expansion	196,000
4991	S.F. Executive Park III	345,000
	TOTAL	3,113,000

SOURCE: Department of City Planning

Totals used in cumulatve analyses usually have been rounded to one or two significant figures to account for uncertainties even in those projects that are relatively far along in the review process. Because the totals are large numbers, differences of one to two million square feet would not cause a statistically significant change in analysis results. The cumulative analyses provide readers with a general idea of the potential impacts of the proposed project in combination with other projects likely to be built before and after the proposed project.

Small differences in specific building or total square footages included in the analysis do not change the general understanding provided by the EIR cumulative impacts discussion.

The EIR analysis of cumulative impacts on transportation and air quality includes all occupied buildings and many of the larger office projects proposed or under construction in the downtown area as of the publication date. The list of projects included in Table D-6, page 284 of the EIR totals about 11 million square feet. In addition, cumulative impacts estimates were adjusted by a factor that reflects average annual increases in traffic on downtown City streets and freeways. Although this factor generally takes into account impacts of proposed projects not listed in Table D-6, it may not specifically account for all the office space reasonably likely to be added to downtown. Therefore, estimates have been made of the additional impact on transportation and air quality from the office space in the projects listed in Table D-6. The projects listed in Table D-6a (page 190 of this section) would total about 9.1 million square feet. Projects in Table D-6a, plus those on Table D-6 are all named on Ms. Hestor's list of projects.

Several projects on Ms. Hestor's list are hotel or condominium proposals; because these types of uses generally do not affect peak-hour traffic or transit, they have not been included in cumulative analyses. One of these hotel projects appears to be inactive. Proposals for a state office building and a federal office building are included on Ms. Hestor's list; these projects are not subject to City review and appear to be quite speculative given the current discussions about the federal and state budgets. Therefore, they are not included in the cumulative analyses. Several projects on Ms. Hestor's list include inflated square footages, 90,000 to 150,000 higher than the amount reviewed or approved by the Department of City Planning. Approximately 300,000 sq. ft. of office space in several small projects included on Ms. Hestor's was not included in the EIR cumulative analyses; because number are rounded for cumulative analyses, this amount of space, if added, would not change either the total number of sq. ft. or the result of analyses.

Several projects included on Ms. Hestor's list have shown no activity for 8 months or more (e.g. Fox Plaza II). These projects have not been included in the cumulative analyses as they are not yet reasonably likely to be added to the City's downtown office space. Some projects, such as 275 Steuart Street and 9th/Bryant have been withdrawn by the project sponsor.

Several projects on Ms. Hestor's list are in very preliminary stages of review and are not well enough defined to include in the cumulative analyses. For many of these projects the developer has revised the size

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TABLE D-6a: BUILDINGS INCLUDED IN THE CUMULATIVE TRANSPORTATION ANALYSIS - PROPOSED PROJECTS

Project Name

Francisco Place
1299 Sansome
955 Front
Columbus/Pacific
580 California
388 Market
466 Bush
222 Kearny
747 Post
1361 Bush
Franklin/McAllister
1151 Market
1049 Market
90 New Montgomery
562 Mission
109 Mission
832 Folsom
201 Spear
Welsh Commons, 4th and Bryant
548 5th
650 7th Street (C)
625 2nd (C)
123 Townsend
Ferry Building
Agriculture Building
847 Sansome
750 Battery
139 Battery
250 Montgomery
Sloane Bldg. (C)
1170-1172 Market
466 Clementina (C)
744 Tehama
95 Hawthorne (C)
480 2nd (C)
252 Townsend (C)
901 Montgomery
Golden Gateway III
550 Kearny
50 UN Plaza
YBC West

Project Name

Ice House Conversion (C)
50 Osgood Place
569 Sacramento (C)
333 California
122 Battery
Russ Tower Addition
333 Bush
980 Market
Polk/O'Farrell
435-37 Monterey
Van Ness Plaza
5th/Market
71 Stevenson
Central Plaza
144 2nd Street (C)
UCB Bank Expansion
401 6th
539 Bryant (C)
Greyhound Bus Terminal
655 5th
615 Townsend (C)
Pier One Development
Mirawa Center/Grant and Pacific
222 Front (C)
401 Washington
160 Sansome
453 Grant
44 Campton Pl.
291 10th (C)
121 Steuart
Holland Ct. (C)
868 Folsom
490 2nd (C)
388-340 Brannan (C)
690 2nd (C)
936 Montgomery
736 Montgomery
50 Grant
1625 Van Ness (C)
Opera Plaza
141 Steuart
Gift Mart

(C) - Conversion from previous use to office building.

SOURCE: Department of City Planning

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and kinds of uses several times and it would be impossible to include accurate information in this EIR about those proposals.

The transportation and air quality analyses of the EIR have been revised as follows:

Add Table D-6a, page 190 of this section, following Table D-6, on page 284a of the EIR, Appendix D.

The following additions and revisions have been made to EIR Section IV.F., Environmental Impacts, Transportation, Circulation and Parking, starting on page 104. On page 104, add the paragraph below, after the second paragraph:

"The cumulative development from the 30 buildings listed in Table D-6 on page 284 would total approximately 11 million square feet of office space. This amount of office space would generate approximately 39,000 peak hour person-trip-ends. Additionally, the City has identified proposed development that would add further trip generation. Approximately 9 million square feet of additional office space has been proposed (see Table D-6a) for a total cumulative development of about 20 million square feet. If approved, this additional development would add 31,500 further person trip ends to the peak hour for a total of 70,500 new person trip ends in the p.m. peak hour. The project would represent approximately one percent of the total cumulative trip ends."

On page 106, add the following paragraph after the first paragraph:

"The amount of vehicular traffic from the additional nine million square feet of office space would be approximately 0.8 times the amount of the traffic from the 30 projects shown in Table D-6 on page 284 of the EIR. Actual impacts would be less than this as the additional buildings would be dispersed over a large area of downtown."

The sentence below has been added to the end of the second paragraph on page 106 of the EIR.

"The impact of the additional 9 million square feet of office space presented in Table D-6a would be a lessening of the level of service at the intersections shown in Table 9."

Page 106, the following has been added to the end of the fourth paragraph:

"Parking demand from additional office space shown in Table D-6a would be approximately 0.8 times the parking demand from the 30 buildings listed in Table D-6. The project would be approximately one percent of the total cumulative demand."

The paragraph below has been added after the first paragraph on page 111 of the EIR:

"Although the transit analysis used a growth factor to account for non-specified development, the factor did not fully account for the additional 9 million square feet of office space, as shown in Table D-6a. The growth factor used was equivalent to approximately two percent of the existing volumes on all agencies except A-C Transit where no growth factor was used. Thus, the ridership from the growth factor represents approximately four percent of the ridership from the 30 projects listed in Table D-6. The additional nine million square feet of office space would increase the ridership over the 30 buildings (in Table D-6) by 0.8 (approximately 0.75 times the increment shown in Table 11). The additional office space would increase the load factors shown in Table 11 by approximately 20 percent. The basis for the Muni analysis was supplied by the Department of City Planning and was compiled from a list of active projects in October 1980."

Insert the following paragraph on page 116 of the EIR, preceding the last paragraph:

"Roadside carbon monoxide (CO) analysis was carried out for worst-case meteorology and dispersion conditions. Based on a more extensive list of projects, cumulative development (including those projects listed in Tables D-6 and D-6a) would result in a violation of an air quality standard on Clay Street, one of the four road segments analyzed in Table 13. The eight-hour standard for roadside carbon monoxide (CO) of nine parts per million (ppm) would be exceeded (assuming a full buildout of all projects by 1984) on Clay Street (between Front and Davis Streets). This violation would occur less than five percent of the time because the worst-case meteorological conditions on which the analysis is based would occur less than five percent of the time. However, assuming emission factors would continue to decrease due to increased vehicle fleet efficiency and assuming normal traffic growth, this violation would not be predicted to occur after 1985. The project would increase the one-hour average on Clay and Sansome by 0.5 and 0.6 percent, respectively, and not effect the one-hour values on the other two road segments. The project would not have any effect on the eight-hour average on any of the road segments analyzed."

In this and other San Francisco EIRs, a land-use type of approach has been used to estimate the transportation impacts of both the proposed project and cumulative development. Under this type of approach, forecast new-building square footage is the basis for projecting gross employment increases and subsequent peak-period travel. As demonstrated in the transportation sections of the EIRs, an estimate of new peak-period travel (distributed by mode) has been made based solely upon the amount of office space projected to be constructed in the downtown area.

An alternate type of approach is to forecast travel demand based upon regional projections of employment share. With a sufficiently detailed data base, the share of future employment for downtown San Francisco (as a part of the greater Bay Area region) can be projected, based directly upon long-range trends. The employment-share projection approach generates net employment increases rather than gross employment increases, as the projections are made from a regional standpoint which assigns jobs by metropolitan sector (area) and which considers long-term industry shifts to, within, and away from each area.

In May, 1982, the Department of City Planning published Working Paper I, Projection of Long-range Transportation Demand, which presents a set of scenarios for future transportation demand for downtown San Francisco, based upon the employment-share approach. This paper was prepared in cooperation with the Metropolitan Transportation Commission (MTC), the Association of Bay Area Governments (ABAG), and the Municipal Railway (Muni). Lacking the needed data from the 1980 census, the City used projections made by ABAG and MTC which were based upon 1975 data. The net projections of employment for the downtown from Working Paper I (adjusted to the year 1984, the year of Bank of Canton project occupancy) are substantially lower than the gross cumulative projections from the land-use approach employed in the transportation sections of this and other San Francisco EIRs. Because of this, the Department of City Planning, Office of Environmental Review (OER), has issued a memorandum, dated July 2, 1982, dealing with the subject of the differences in the two types of approaches, and recommending that both approaches be used in future EIRs 'to give a more balanced assessment of future peak transportation demand.' This memorandum is on file with and available from the Office of Environmental Review, 450 McAllister St., 5th Floor. The memorandum calls out some of the fundamental differences between the two approaches and also details the limitations of each approach.

The paragraphs below have been added to page 111 of the EIR, following the first added paragraph from page 191 of the Summary of Comments and Responses.

"The land-use approach uses square footage of office space as a basis for estimating peak transportation demand; this approach generally assumes that as new office space is constructed, it would be occupied. The employment-share approach uses a net increase in jobs as a basis for estimating peak demand, and reflects job loss as well as additions to the labor force. Briefly, the fundamental differences between (and limitations of) the two approaches are:

"The land-use approach (as it has been applied in this EIR) assumes no loss of existing space in the downtown area and, consequently, no loss of employment from that area. Thus, all of the travel from the proposed office space has been considered to be an increment to be added to the existing travel currently on the transportation network. The employment-share approach generates a net increase in employment in the downtown that has taken account of loss of employment as industry and offices move out of the City, replacement of one type of industry with another (industry shifts), and replacement of existing office space with new office space.

"The land-use approach assumes that literally all of the currently proposed development in the downtown area (no matter where it is in the environmental review process) will be constructed and fully occupied within the time frame of the (Bank of Canton) project development and occupancy. No allowance has been made for less-than-100% occupancy or for proposed developments that are never constructed. The employment-share approach makes no implicit assumptions concerning occupancy rates or actual square footage of development constructed; rather, it projects an employment share of the region based directly upon extrapolation of past trends.

"In basic terms, the land-use approach identifies all potential development within the downtown (regardless of the likelihood of occurrence) and adds the demands generated by the development to the existing transportation network, assuming that the existing regional distribution of trips will persist. The employment-share approach looks at the existing employment in the downtown, forecasts the incremental change in employment based upon regional considerations and past trends, and assigns the regional distribution of trips, based on such forecasts. Neither of the two approaches has attempted to project future changes in modal split.

"To illustrate the differences in the two approaches, the following table shows the total employment projections by the two methods (and the project's share thereof), the regional distributions of trips, and Muni's share of the new transit travel (and the project's share thereof).

"As shown in the table, the employment-share approach generates about 60% fewer employees in the downtown and about 60% fewer riders on the Muni than does the land-use approach. The employment-share approach would thus reduce the transit demand impacts discussed in the first added paragraph on page 111 of the EIR. Consequently, the land-use approach can be considered to be a 'worst case' analysis for Muni. Similar conclusions can be drawn for the other transit agencies.

"Several considerations concerning both of the methods need to be discussed. The land-use method, as it has been applied in San Francisco EIR's, analyzes impacts for the p.m. peak hour, whereas the employment-share method analyzes the a.m. peak. Several reasons exist as to why one peak (or the other) may be the better one to analyze.

"First, the p.m. peak may be more useful to analyze, in that actual observation shows that the p.m. peak has a greater overall effect on the local street network and transit system in the downtown area than does the a.m. peak, as more travel takes place during the p.m. peak. Also, transit service is more inclined to differ from scheduled times during the p.m. peak than during the a.m. peak, as operational delays have had an 8-to-10-hour period over which to accumulate. Finally, the on-ramps to the freeway/bridge system are greater bottlenecks (in the p.m. peak) than are the off-ramps (in the a.m. peak).

"Conversely,the peaking characteristics of the a.m. peak may be more useful in that they are much sharper than those of the p.m. peak (i.e., a greater percentage of the peak-period travel occurs during a single hour). Also, as a result of the bridge system into San Francisco, travel inbound into the City is much easier to document, as vehicles must pass through the toll booths on the Golden Gate and Bay Bridges. Finally, a greater proportion of the travel occurring during the a.m. peak is employment-related; the p.m. peak includes shopping and pleasure trips.

"The land-use approach, as it has been used in this EIR, examines the p.m. peak because it has been observed to be the worst case for congestion on City streets. The analytical approach does not reflect the spreading of the p.m. peak that is currently occurring, as all of the new trips have been assumed to take place in one single hour.

"One of the major points about the land-use approach is that it has not accurately considered a net change in the amount of office space in the downtown, as all of the proposed development has been added to the existing. With more and more existing office space being replaced by new office space as construction occurs in the downtown, the effect of continually adding new space in the analysis without subtracting lost space is becoming an important factor. The land-use analysis assumes all new office space is fully occupied. The assumption of a functional vacancy rate of 5% is not uncommon (OER Memorandum, July 2, 1982, page 2, available for public review at 450 McAllister St., 5th Floor). With 20 million square feet of new office space assumed in the land-use analysis to be occupied by late 1984, this 5% would amount to approximately 1 million square feet, leading to 4000 employees (at 250 square feet per employee), the Muni share of which would be about 900 riders in the p.m. peak hour. This adjustment alone would reduce Muni peak-hour impacts by about 900 riders in the cumulative analysis stated above.

Table 10a: COMPARISONS OF LAND-USE AND EMPLOYMENT SHARE APPROACHES FOR LATE 1984 (TIME OF OCCUPANCY OF BANK OF CANTON PROJECT)

Approach	Downtown Employment Increase	Project Share*	Regional Trip Share				Muni Peak-hour Increase	Project Share**
			S.F.	Pen.	E.B.	N.B.		
Land Use	80,500	1.1%	49%	16%	24%	11%	18,300	0.6%
Empl. Share# (maximum)	31,700	2.8%##	50-54%	19%	17-21%	10%	7,300###	1.6%

NOTE: As explained in the text above, comparisons between the entries for the two approaches must be made with the understanding that the land-use approach reflects gross increases in employment and transit demand, while the employment-share approach reflects net increases therein. The differences among the regional trip share figures reflect these and the other differences between the two approaches.

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* Employment generated by the proposed Bank of Canton project, as a percent of the cumulative downtown-employment increase.

** Muni peak-hour trips generated by the proposed Bank of Canton project, as a percent of the cumulative downtown Muni peak-hour increase.

# These figures, representing the worst-case analysis under the employment-share approach, have been adjusted to the year 1984, the expected date of occupancy of the proposed Bank of Canton project, from the OER memorandum's 1990 figures, reviewed and accepted by MTC, ABAG and Muni. The (backward) adjustment is based on a (compounded) 10%-per-year growth in office space. (The OER memorandum forecasts, for 1990, a downtown employment increase of 56,100 and a resulting Muni peak-hour increase of 12,900 trips. Note that the land-use-approach entries assume that an additional 20 million square feet of office space will come on line by the late 1984.

## Implies that the Bank of Canton would be one of an average of about 35 projects, of approximately the same size, coming on line by late 1984.

### Also takes into account reductions in demand due to shift work and absenteeism. Based on 54% regional trip split to San Francisco (worst-case).

"The land-use approach calculations have assumed transit capacity to be fixed at existing levels. The OER memorandum points out, 'It should be recognized that transportation is a more 'elastic' resource with many options for expansion including increasing existing capacity by using articulated vehicles, expanded car pool and van pool programs and increasing the peak commuter period through flex-time programs, among others."

The employment-share analysis has based its projections upon long-term trends. If future office development does not occur along the lines of the past long-term trends, then the projections made in Working Paper I would be revised. The average annual growth during the period 1965-1980 was less than the growth per year proposed, approved, or under construction, for the period 1980 to 1984. The employment-share approach assumes average growth through 1990 would be at the lower historic rate, reflecting a slowdown in the second half of the decade (due to changing business conditions) from the 1980-1984 rates.

As no way exists to forecast how the current decade's cycle of development may differ from past development, no judgment of the applicability of results from Working Paper I may be made at this time. Consequently, this EIR has retained the land-use approach and attempted in this response to integrate the employment-share approach. Both methods should be looked upon as describing potential scenarios of future conditions.

HOUSING

Residential Hotel

COMMENTS

"I speak specifically to the housing impact of this project and to the loss of 22 units of residential hotels. Residential hotels, along with public housing, are the last low-income housing resource in San Francisco, particularly in the downtown area.

"As I understand it, the property in question was bought and the hotel was emptied, and as a condition of that sale, it had to be emptied. It seems quite clear that this is in violation of the letter and the spirit of the residential hotel act, and it should be properly mitigated.

"To allow this to continue would be to open a gigantic loophole for other owners of residential hotel property wishing to escape the provisions of both the California Environmental Quality Act and, more specifically, the master plan, the housing element, and the residential hotel act, to tear down the extremely short supply of low-income housing and proceed with much more profitable commercial development." (Michael Harney)

"On page 50, as Mr. Harney already mentioned, your discussion of the residential hotel is insulting. I mean I was heavily involved with that residential hotel ordinance a year ago. And the analysis of the impacts and the violation of the law in this EIR are staggering. This hotel was acquired by this developer, as I read the sketchy information in the EIR, with the condition that it be illegally vacated. That belongs in the EIR. They only bought the property on the grounds that it was coming vacant. And that -- how do I find that out? By looking at Footnote 5. Footnote 5 doesn't belong as a footnote. Footnote 5 is on page 52. That belongs in the text because people don't read footnotes. And that is the most damning information in the whole EIR. The Bank of Canton went out and asked someone to violate the law by evicting tenants so that they could have a vacant residential hotel building in violation of the residential hotel conversion ordinance....According to the EIR on page 52 the premises were vacated in July 1980. The hotel ordinance was passed a couple of months before then.

"You need to have a little history of the hotel ordinance and this building in there because the loss of residential hotel space in Chinatown and Manilatown has been very severe. I mean that is one of the reasons why that ordinance went into effect, was the problems in Chinatown." (Sue Hestor)

"Do we know the date and whether it was vacated after the hotel ordinance?" (Commissioner Bierman)

RESPONSE

The acquisition and ownership of the 22-unit residential hotel at 619-25 Clay Street is noted in EIR page 50, paragraph three, and page 52, Footnote /5/. The relation of the project to City Ordinance No. 330-81, Chapter 41 of the Administrative Code (the Residential Hotel Unit and Apartment Unit Conversion and Demolition Act) is described on page 87, the third full paragraph. Since publication of the Draft EIR, the relation of the project to the ordinance has been clarified, and the paragraph is replaced with the following text:

"The project would result in the demolition of the vacant 22-unit residential hotel at 621 Clay Street. City Ordinance No. 330-81, Chapter 41 of the Administrative Code, regulates the demolition and conversion of residential hotel units to minimize adverse impacts on the housing supply and on displaced, low-income, elderly and handicapped persons resulting from the loss of such units. Ordinance 330-81 became effective June 15, 1981. This replaced Ordinance 15-81, effective January 2, 1981 (and amended by Ordinance 106-81, April 9, 1981). Ordinance 15-81 replaced the first residential hotel ordinance, Ordinance 564-79, first effective November 23, 1979. The ordinance is administered by the San Francisco Department of Public Works, Bureau of Building Inspection. The Superintendent of Building Inspection stated in February 1982, that "as long as the building is used exclusively by the Bank of Canton for purposes related to Bank of Canton operations, it will not be subject to the Residential Hotel Conversion and Demolition Ordinance. If the bank sells the building or uses it for other purposes, then [the bank] must comply with the Ordinance."/5A/ The Superintendent stated in June 1982, that "in as much as the Bank of Canton is, in effect, complying with Section 41.10 of the ordinance, and providing one-for-one replacement for 22 residential hotel units which would be demolished, the Superintendent proposes to issue a letter stating that the proposed Bank of Canton building has, in effect, complied with provision 41.10,...after the proposed replacement housing is under construction and the monies transferred to the Chinese Community Housing Corp."/5B/

"The project sponsor has acquired a 50-year lease on a site at Ninth Avenue and Clement Street, San Francisco, and has engaged an architect to design a new residential hotel of 21 units for that site. The new units would be managed under a 30-year lease by the Chinese Community Housing Corporation (CCHC), a non-profit corporation. The terms of the lease to CCHC would assure that rents would be kept at affordable levels for low-income persons. Initial monthly rents would be $100.00 for a single room and $125.00 for a double room, with increases not to exceed seven percent per year. This agreement has been structured to comply with applicable restrictions on the Bank of Canton's legal authority under the California Financial Code to build, operate and own residential property (California Financial Code, Section 750).

"The residential hotel proposed by the project sponsor would include 21 units with an average unit size of 135 square feet. There would be six handicapped-accessible toilets and shower rooms (two per floor), three community kitchens (one per floor), and a laundry room. Each room would have a closet, refrigerator and sink. The building would have a handicapped-accessible elevator, seven parking spaces and a 920 square-foot-rooftop deck with elevator access./5C/

"Because development of the residential hotel proposed at Ninth Avenue and Clement Street would provide 21, rather than 22 units, the project sponsor would propose to pay to the San Francisco Residential Hotel Preservation Fund Account an amount equal to 40 percent of the cost of construction of one unit comparable to the units to be demolished at 621 Clay Street, plus a pro rata share of site costs, with a written request that the payment be used for rehabilitation or construction of residential units in Chinatown or North Beach./5D/ Pending completion of the proposed replacement units at Ninth Aenue and Clement Street, the project sponsor would post an irrevocable letter of credit in the amount of the construction cost of the units, estimated to be $480,000. That letter of credit may be drawn upon in the event that development of the proposed replacement units does not take place. The proceeds of the letter of credit would then be used to provide the replacement units which the project sponsor has committed to construct."

Footnotes /5A/-/5D/ are added on page 97 of the EIR:

"/5A/ Robert Levy, Superintendent, Bureau of Building Inspection, letter to Mrs. Wei-Cheng Wang, Bank of Canton of California, February 9, 1982.

"/5B/ Robery Levy, Superintendent, Bureau of Building Inspection, letter to Edwin Lee, attorney, Asian Law Caucus, June 7, 1982."

"/5C/ Danny Lee, Vice President, Bank of Canton of California Building Corporation, memorandum, May 14, 1982.

"/5D/ Gordon J. Lau, attorney, letter, May 18, 1982."

COMMENT

"Who lived in it? Who are the people who lived in that building? How long had they been there? How were they evicted? Were there court proceedings taken to evict them? How did the building become vacant? I think you need to have that in the EIR even if it wasn't subject to the residential hotel ordinance. When residential property is vacated, how did it become vacated? What were the rent levels? How long were the tenancies? Those are real basic questions because that goes to a direct housing impact. Where did those people move to? Real elementary stuff. It deserves more than three lines on page 50. And the footnote has to come up." (Sue Hestor)

"We do need a better description of the residential hotel being demolished, size of the units, number of baths and kitchens, the rents, and whether when they moved--anyone was helped to move--or what arrangements were made." (Commissioner Bierman)

RESPONSE

Prior to acquisition by the Bank of Canton, the residential hotel units were occupied by 21 individuals whose occupancy had dated from 1965 to 1979. Twenty of the 22 units rented for $95 per month, one unit for $155, and one for $200. The tenants were provided relocation allowances of $2,000 a person by the previous owner. No eviction or other legal proceedings were undertaken to vacate the building. No information is available as to the present residences of the former tenants of the hotel.

The average size of the existing 22 residential hotel units is 121 square feet. The building has one community kitchen, six toilets (two per floor), three showers (one per floor). Each room contains a sink; each of the two larger units has a kitchen. The building has no elevator./1/

COMMENT

"And as a result of that, your looking at the replacement of those units as a mitigation measure is extremely inappropriate. That's not mitigation for new stresses put on by the project on the City. It is a legal requirement to meet the conditions of having illegally converted a unit." (Sue Hestor)

RESPONSE

The Superintendent of the Bureau of Building Inspection has determined both that the Bank of Canton would not be subject to the ordinance as long as the residential hotel is used exclusively for bank purposes and that the Bank is, in effect, complying with the ordinance by providing one-for-one replacement, as described in the response beginning on page 194 of this section. The first full mitigation measure on page 132 has been deleted.

In Section I., Summary, page 3, add the following at the bottom, to become the final two paragraphs:

"The project sponsor would provide one-for-one replacement of the 22 residential hotel units on-site, consistent with Ordinance 330-81, Chapter 41 of the Administrative Code. The project sponsor has acquired a 50-year lease on a site at Ninth Avenue and Clement Street, San Francisco, and has engaged an architect to design a new residential hotel of 21 units for that site. The new units would be managed under a 30-year lease by the Chinese Community Housing Corporation (CCHC), a non-profit corporation. The terms of the lease to CCHC would assure that rents would be kept at affordable levels for low-income persons. Initial monthly rents would be $100.00 for a single room and $125.00 for a double room.

"Because development of the residential hotel proposed at Ninth Avenue and Clement Street would provide 21, rather than 22 units, the project sponsor would propose to pay to the San Francisco Residential Hotel Preservation Fund Account an amount equal to 40 percent of the cost of construction of one unit comparable to the units to be demolished at 621 Clay Street, plus a pro rata share of site costs, with a written request that the payment be used for rehabilitation or construction of residential units in Chinatown or North Beach."

The third paragraph on page 7 of the EIR has been deleted.

Regional Housing Characteristics

COMMENT

"On...page 50 where you are incorporating by reference the 101 Montgomery EIR, I think you should have a summary there.... I think when you incorporate by reference without giving you the basic information, no one understands what it means." (Sue Hestor)

RESPONSE

The information on regional housing stock incorporated by reference from the 101 Montgomery EIR is summarized on page 50 of the EIR. Starting with the third sentence of the third full paragraph, the EIR states "information on the housing stock includes amount, growth factors, vacancy rates, and purchase and rental costs. Both regional and San Francisco housing stock are characterized by low growth, low vacancy rates, and high purchase and rental costs in relation to typical wages paid. These factors, together with high interest rates and high San Francisco land costs, have tended to constrict the supply and affordability of housing in San Francisco."

COMMENT

"While [Table C-2] consider(s) the cumulative demand of San Francisco office development on the housing supply of the various counties, obviously in assessing the impact of that demand on the regional housing shortage the creation of City and regional housing demand by other economic development is an essential factor in the equation - but it is omitted in [the table].

"In various recent ABAG studies such projections [of regional housing demand] from all economic development, not just office development are available. Also available sources for this information can be found in EIR's for major development projects in other counties (e.g., Century Office Park in South San Francisco and Transpacific Office Center in Oakland), as well as in the respective Citizens Housing Task Force reports pursuant to AB 2853 prepared by all counties. Adding [a column] identifying the 'Other Cumulative Housing Demand' will make clear both whether an overall regional housing demand/supply imbalance exists, which most concede is the case, how serious it is in order of magnitude, and what general fraction of it results from San Francisco office development. These are all very relevant matters for review of the projects." (Tony Kilroy)

RESPONSE

The "Report of the Citizen's Housing Task Force" (San Francisco, July 29, 1981) projects a need for 30,000 dwelling units in San Francisco between 1980 and 1989. This projection was made using a demographic analysis; the report did not distinguish between demand attributable to office development and demand from other sources. It should be noted that new household formation in the Bay Area will result not only from economic development but also from in-migration, children reaching maturity and other factors.

The EIR discusses the limited supply of housing relative to the demand in San Francisco on pages 50 and 86. Based on data available since publication of the EIR, Table C-2, page 279 of the EIR, has been revised and indicates that San Francisco housing demand from office development in San Francisco from 1979-1985, based on total new employment of 39,300, rather than 77,500, is projected to be 8,700 units, rather than 17,200, while the housing stock growth from 1980 to 1985 in San Francisco is projected to be 5,000 to 8,000 units. The regional housing demand attributable to office development in downtown San Francisco is projected to be 26,800, rather than 48,200; this projection assumes 1.8 downtown workers per household in San Francisco and 1.3 downtown workers in other counties (rather than 1.5). The regional housing stock growth is projected to be 146,000 to 149,000 units. Office development in San Francisco is projected to account for one to two-tenths of a percent of projected regional demand, based on data in Table C-2 (revised), page 202 of this section.

Housing Demand

COMMENT

"In terms of housing demand, you're using employment multipliers on page 85, but you're not using employment multipliers on housing, and that's a perpetual request on my part." (Sue Hestor)

"On page 86 on housing, I find the figures -- it just starts on page 85. I'll just go through them. You need to factor in secondary employment demand in housing. I don't like the way you just say you can't figure it out, bang, you can't have to do it. Do it. Apply the same ratio, the same projections that you do for construction, and figure out on your formulas of low, mod, etcetera." (Sue Hestor)

RESPONSE

Based on a San Francisco employment multiplier of 1.6 (0.6 secondary jobs for each primary job generated) (Bank of America Data Center Final EIR, EE 74.128, certified August 28, 1975, page 92), the project would add about 430 net new jobs in San Francisco through secondary multiplier effects. (The multiplier was calculated for the 710 net new employees at

TABLE C-2 (Revised): PROJECTED EFFECTS OF DOWNTOWN OFFICE DEVELOPMENT ON REGIONAL HOUSING MARKETS, 1980-85

	Residency of S.F. Office Employees*	Net Project Demand in 1985	Cumulative Demand 1979 to 1985**		Net Housing Stock Growth 1980-1985***	Project Demand as % of Growth 1980 to 1985****
	Percent	No. Households**	No. Emp.	No. Households	No. Units	Percent
San Francisco	40	160	15,700	8,700	5,000 to 8,000	2.0 to 3.2
Peninsula (San Mateo and Santa Clara Cos.)	18	100	7,100	5,400	75,000	0.1
East Bay (Alameda and Contra Costa Cos.)	30	165	11,800	9,100	41,000	0.4
North Bay (Marin and Sonoma Cos.)	12	65	4,700	3,600	25,000	0.3
TOTAL	100	490	39,300	26,800	146,000 to 149,000	0.3

* Weighted average of expected employees in Federal Reserve Bank (EE 78.207), 101 California Street (EE 78.27), Pacific Gateway, (EE 78.61), and Crocker National Bank (EE 78.298), from 456 Montgomery Street Final EIR (EE 78.178), p. 167.

** Housing demand is based on the assumption that the housing requirement formula for new office development contained in "Office/Housing Production Program (OHPP) Interim Guidelines" (January 1982) reflects the actual demand for housing in San Francisco. The same formula was applied to the other counties except the number of workers per household is assumed to be 1.3 based on 1980 Census data. Cumulative demand is based on a list of projects available for public review at the Office of Environmental Review, 450 McAllister Street, 5th Floor, San Francisco, California.

*** San Francisco growth estimates are based on ABAG, January 1980, San Francisco Bay Area Housing Activity Report, Number 2, and on Mary Schlosser, Research Analyst, Population Research Unit, California Department of Finance, telephone communication, August 13, 1980. Other housing market estimates are based solely on Department of Finance data. Growth rates are based on averaged rates (San Francisco 0.4%, Peninsula 2.2%, East Bay 1.2%, North Bay, 2.5%).

**** This column is based solely on the project's demand. Demand due to other office developments, immigration, and other regional housing demand factors would tend to further constrict the supply of regional housing available to households resulting from this project.

SOURCE: Environmental Science Associates, Inc.

the project site and was not applied to the existing 170 employees at the site.) Assuming that 430 net secondary jobs would be added to San Francisco, it can be roughly estimated that these new employees would create additional demand for about 95 housing units in the City. This estimate was derived from a formula contained in Department of City Planning Memorandum entitled "Housing Requirements for Office Development in San Francisco," July 1981. That formula assumes that 40 percent of all new downtown workers would live in San Francisco and that there would be 1.8 workers per household. The Bank of America Data Center Final EIR (page 93) estimates a multiplier of 0.13 for downtown San Francisco workers who would be non-San Francisco residents. Based on this multiplier, another approximately 20 net new housing units would be demanded in the Bay Area. (Bay Area housing demand estimates are based on 60 percent of downtown office workers living outside of the City and 1.5 workers per household; see notes in Table C-2, on page 276 of the EIR).

Secondary housing demand estimates discussed above should be considered as rough estimates of secondary housing demand attributables to new downtown office workers. The analysis assumes that secondary job holders would have the same housing demand and residency patterns of primary job holders (office workers). As secondary employment, by definition, is support employment such as clerical and retail workers, it can be expected that these workers would have different housing demand and needs than in primary wage earners.

COMMENT

"While the previous EIRs for Five Fremont Center and 101 Montgomery which are referenced ... do include a discussion of the issue of displacement of lower-income households due to the housing demand/supply imbalance, this issue is of such critical magnitude that it should be discussed in detail ... above and beyond such references. Is there really something more important than people losing their homes to economic competition engendered by these projects' net housing demand?" (Tony Kilroy)

RESPONSE

The effects on low-income households of increasing housing demand in an area where demand for housing outstrips the supply are detailed in the 101 Montgomery Street FEIR, which is incorporated by reference into the Bank of Canton EIR, and summarized on page 50, paragraph four.

According to the State EIR Guidelines (California Administrative Code Title 14), Section 15149, "An EIR may incorporate by reference all portions of another document which is a matter of public record or is generally available to the public. Where an EIR uses incorporation by reference, the incorporated part . . . shall be briefly summarized where possible or briefly described if the data or information cannot be summarized." Section 15016(s) encourages public agencies to reduce paperwork by, among other things, "using incorporation by reference". The practice is intended to streamline the environmental review process, not to diminsh the importance of issues.

COMMENT

ABAG's city council members and county supervisors support expansion of the housing supply in areas easily accessible to major job centers to lessen the imbalance between jobs and housing, reduce transportation commute loads and impacts on air quality and alleviate upward pressures on housing prices in the Bay Area. They urge that cities with job growth in excess of past housing growth accept responsibility for providing more housing at price ranges and levels affordable to workers coming to these new jobs.

The above-referenced [Bank of Canton] project will result in a net increase of 710 jobs on site, which, according to Department of City Planning estimates, will result in a demand for at least 155 additional housing units in the City. Staff finds supportive of regional policies the sponsor's commitment both to contribute to the City Housing Production Program investment pool and to provide replacement housing. In the absence of these measures, staff would find supportive, the alternative measures described on page 132 as 'under consideration'. (Michael Visconti)

RESPONSE

The comment is acknowledged. The City Planning Commission will consider this comment by ABAG in its deliberations on the project.

HOUSING AFFORDABILITY

COMMENT

"Page 88. It seems hard to believe that 70 percent of the employees will average at least 45,000 and only 30 percent average 19,200. I think those figures ought to be checked. I think it's the first time they have done this kind of averaging, and I think it gives kind of a false impression of wealth on the part of employees." (Commissioner Bierman)

RESPONSE

Since publication of the EIR, more complete information has been developed on income distribution of San Francisco employees. Housing Affordabilty, pages 88-89 of the EIR is replaced with the following text, and a new Table C-3, Housing Affordability by Household Income, is added to Appendix C of the EIR, page 276a:

"Housing Affordability

"To determine the affordability of housing in San Francisco for project employees, two major factors must be known: the household income of project employees and the price of housing. Although certain information is available from the 1980 U.S. Census, all of the data have not yet been published. Without such specific information, a variety of sources have been reviewed to project housing affordability.

"Income

"A survey of downtown office workers by the San Francisco Planning and Urban Renewal Association (SPUR) in 1974 included information on salary ranges; it estimated an average annual income level of $16,300./6/ Given that the weekly earnings of nonsupervisory finance, insurance and real estate sector workers increased about 67 percent nationwide between 1974 and December 1981, inflating the $16,300 figure yields an average salary of about $27,300 for downtown office workers./7/ Although the SPUR data have been inflated to 1982 levels, there is no way to verify that the distribution of job classifications has remained the same since 1974, or whether salary levels have, kept pace with, or exceeded the rise in the nationwide Bureau of Labor Statistics index.

"More recent published information on office workers in the Bay Area indicates that the 1980 annual salary for support and clerical personnel ranged from about $8,000 to $29,000./8/ Wage information is not available for most professional occupational categories, with the exception of computer system analysts and drafters, which have mean annual salaries of $25,740 and $20,000, respectively;/8/ there are no known published data on income levels specifically for workers in San Francisco since the SPUR study. An October 1981 survey of 60 percent of the tenants at 601 Montgomery St. revealed that about 34 percent of the office workers were professionals with salaries ranging from $21,000 to $300,000 (average $90,000); 36 percent were middle management personnel with salaries ranging from $12,000 to $70,000 (average $45,000), and 30 percent were secretarial/support workers with salaries ranging from $10,000 to $35,000 (average $19,200)./9/ Tenants of the 601 Montgomery St. building are primarily law, insurance, and professional service firms which have a larger proportion of management and professional staff than clerical staff, thus contributing to the relatively high average salary ($52,600) of this building's employees.

"Without knowing the office tenants that would occupy the Bank of Canton project, it is impossible to state with certainty the salaries of project employees. From the above information, annual salaries could range from about $8,000 to $300,000 and would probably average between $25,000 and $30,000.

"Bank of Canton employees who now work at the site and would be expected to work at the site after project completion had the following salary distribution in 1981: 75 percent have annual salaries of less than $20,000; eight percent between $20,000 and $25,000; eight percent between $25,000 and $30,000, and nine percent, more than $30,000./9A/

"Housing Supply

"According to the 1980 Census of Housing, owner-occupied housing constitutes about one third of San Francisco's housing stock. The median value of this type of housing was $103,900 in 1980 and the vacancy rate was 1.7 percent./11/ October 1981 data from the San Francisco Board of Realtors show that the average selling price of a house in San Francisco was $151,200 in 1981, and that prices ranged from $95,000 to $236,750 for homes sold in the week of October 1, 1981./12/

"The 1980 Census data for rental housing shows that the median rent was $266 in San Francisco and the vacancy rate was 4.1 percent./11/ Inflating the median rent from April 1980, the date of the Census, through October 1981 would yield a median rent of $307 based on a 15 percent increase in the Consumer Price Index during that time. According to a rent survey by the Department of City Planning in 1980, median rents in the City ranged from $289 for a studio apartment to $588 for a unit with three or more bedrooms, and averaged $455 for all types of units. However, these data do not represent the rental stock; they (the median monthly rents) were derived from a small sample of vacant units which were advertised for rent in the San Francisco Examiner/Chronicle./13/ Since the Census data are derived from a more extensive sample, this information may reveal a more accurate representation of rental costs than selected newspaper advertisements. Because the median was $266, the range of rental prices would be both higher and lower than this figure. While the census data reflect the entire rental stock, including residential hotels which have generally lower rents than other types of rental dwellings, not all types of units would be available to new households. Stable households in the City may have occupied the same unit for many years. Lower-priced units probably are rented quickly and may not appear in newspaper advertisements.

"Affordability

"From the information available, it is impossible to determine with certainty the income distribution of project office workers. Specific tenants for the building are not known. The survey information on income distributions contained in the 1974 SPUR study is about eight years old. The October 1981 survey of 601 Montgomery St. tenants may not be representative of tenants of the project. Assuming a median income in the $25,000 to $30,000 range for project workers, it is important to bear in mind that half would earn more and half less than this median, with the spread of this income range not known.

"Based on the available data, assumptions must be made to reach conclusions regarding housing affordability. Appendix C, Table C-3, page 276a, illustrates the housing affordable to individuals and households with a wide range of incomes, assuming 30 percent of gross household income is spent for housing. Assuming a 20 percent down payment, 30-year mortgage, and a 16 percent interest rate, Table C-3 illustrates that about two-thirds of project employees could not afford to own housing in San Francisco, although (depending on the number of workers per household) about one-third would be able to do so. Based on the stated assumptions, most project employees, except the lowest-paid clerical workers desiring to live alone, would be able to afford rental housing in San Francisco. These conclusions should be qualified because household circumstances vary. Housing affordability is determined not only by household income and price of housing, but also by equity in existing real estate, savings, debt, access to credit, interest rates, number of dependents, number of wage earners, tastes and preferences."

Replace the footnotes 6-9 on pages 96-97 of the EIR with the following:

"/6/ San Francisco Planning and Urban Renewal Association (SPUR), Impact of Intensive High Rise Development in San Francisco, Detailed Findings, June, 1975.
/7/ Data are inflated by about 67 percent, the national average percentage increase in weekly earnings of nonsupervisory finance, insurance and real estate employees between 1974 and December 1981 (U.S. Bureau of Labor Statistics, Monthly Labor Review, June 1975 and February 1982).

TABLE C-3: HOUSING AFFORDABILITY BY HOUSEHOLD INCOME

Gross Annual Income Per Household or Per Individual	Maximum Affordable Monthly Housing Expenditure*	Housing Cost and Type of Unit			Source
		Monthly Cost**	Type of Unit	(Price)	
$5,000	$125				
8,300 (a)	208				
10,000	250				
10,680	267	$267 -	Census Median Rent		(e1)
11,560	289	289 -	Studio Apartments		(f1)
15,000	375				
18,200	455	455 -	Median Rent, All Units		(f2)
20,000	500				
23,520	588	588 -	Rent, 3+ Bedroom Units		(f3)
25,000 (b)	625				
27,300 (c)	683				
30,000 (b)	750				
35,000	875				
40,000	1,000				
40,880	1,022	1,022 -	Lowest House Price	($95,000)	(g1)
45,000	1,125	1,125 -	Census Median Value	(104,600)	(e2)
50,000	1,250				
52,560 (d)	1,314				
55,000	1,375				
65,080	1,627	1,627 -	Median House Price	(151,203)	(g2)
≀					
101,880	2,547	2,547 -	Highest House Price	(236,750)	(g3)
≀					
300,000 (d)	7,500				

See following page for references.

TABLE C-3: HOUSING AFFORDABILITY BY HOUSEHOLD INCOME (continued)

* The Office/Housing Production Program (OHPP) Interim Guidelines (January, 1982) define affordable housing as follows:
rental expenses not exceeding 30% of gross monthly income, adjusted for family size; and home ownership expenses not exceeding 38% of gross monthly income, adjusted for family size, including mortgage payments, property taxes, insurance, and/or homeownership association dues.
For the purpose of this table, 30% of gross monthly income is used to calculate housing affordability for both renters and owners. For owners it is assumed that 8% of gross monthly income would cover property taxes, insurance, and/or homeownership association dues and other related expenses. No adjustment has been made for family size because family circumstances vary widely.

** Monthly housing costs refer to rents and mortgage payments for the housing prices shown in parentheses; sources of rents and house prices are as footnoted. Monthly costs of ownership housing were calculated as monthly mortgage expenses assuming 20% down payment, 30-year mortgage, and 16% interest rate, not including insurance, property taxes, and other related housing costs.

a. U.S. Bureau of Labor Statistics, March, 1981, "Area wage survey for the San Francisco-Oakland, California Metropolitan Area." $8,300 was the mean 1980 income of inexperienced file clerks, one of the lowest-paid office occupations listed.

b. The range of $25,000 to $30,000 is assumed to approximate the median annual income of project employees (see discussion of Income, Section IV. D.).

c. The $27,300 income figure was derived by inflating the $16,300 median income of downtown office workers from the 1974 SPUR survey through December, 1981 by 67% using U.S. Bureau of Labor Statistics national wage information for nonsupervisory finance, insurance, and real estate sector employees since 1974.

d. Montgomery-Washington Building FEIR, 81.104E, certified January 28, 1982. The median salary of wage earners at 601 Montgomery St. was estimated to be $52,560 and the highest salary for corporate officers $300,000, according to a 1981 survey.

e. City Planning and Information Services, "1980 Census Information," March 1982:
1. median rent 2. median noncondominium housing value
Rental data include residential hotels whose rent levels may be substantially lower than other types of rental dwellings and may therefore have an effect on the median rent.

f. Department of City Planning, "Rent Survey," 1980. Median rents are for:
1. studio apartments 2. all units 3. 3+ bedrooms
These data are based on a small nonrandom sample of newspaper ads and may not reflect true rental costs.

g. San Francisco Board of Realtors, "Multiple Sales Service," October 5, 1981. (Annual data on housing sales prices including all homes sold from February 11, 1981 to October 1, 1981):
1. lowest price 2. median price 3. highest price

SOURCE: Environmental Science Associates, Inc.

/8/ U.S. Department of Labor Statistics, 'Area Wage Survery for the San Francisco-Oakland, CA, Metropolitan Area,' March, 1981.
/9/ Montgomery-Washington Building Final EIR, 81.104E, certified January 28, 1982, page 75.
/10/ Danny Lee, Vice President, Bank of Canton of California Building Corporation, telephone conversation, March 10, 1982.
/11/ Association of Bay Area Governments (ABAG), 'Census Data Bulleting No. 6,' March 1982.
/12/ San Francisco Department of City Planning, Rent Survey, 1980."

The number of the remaining notes on pages 97-98 have been changed to follow the new notes consecutively.

Table C-3, Housing Affordability, pages 207-208 of this section, is added to the EIR as pages 279a-279b.

COMMENT

"I find the median San Francisco rent used in here at $307, and therefore everyone is in the market for rental housing, to be a further absurdity. That doesn't correspond with the reality that all of the units that come on the market are under vacancy decontrol. I mean, if they come on the market, if there's some new workers moving in, you know, from Cleveland or Larkspur or whatever they're moving in, and they're moving into San Francisco, that unit is decontrolled, period.

Can you go out and find a two-bedroom unit for $307? Can you even find a studio for $307? No. I mean, why are you letting people lie like this in EIR's? Those figures are out of the air, and they're bullshit. And we deserve better than that because this is the City Planning Department document. This isn't Bank of Canton. You put your imprimatur on it when you send it out. You agree with these at least for the purposes of discussion. And I don't find that corresponds with reality at all, and I really challenge those housing figures."

"I find the use of 601 Montgomery to analyze -- and that's on pages 88 and 89 -- to be so outrageous, I can't believe you're letting them get away with that. Are you really seriously telling me that 33 percent of the people will be in the market for -- no -- 34 percent of the people will be in the market for housing at the rate of $305,000, 36 percent will be in the market for housing at $218,000, and 30 percent will be in the market for housing at $93,000? Your figures say that everyone is in the housing market in this building. That doesn't correspond with reality on the street. They are self-serving projections from the owner of 601 Montgomery, who also wanted to build Montgomery and Washington. And those figures -- really, you justify them to me. Do they correspond with the reality in the census data? Do they correspond with the reality in the Planning Department's data? Tell me why you're letting these figures go through, because I don't think you can use those figures." (Sue Hestor)

"Page 89. On an average, all employees could afford $93,000 and above housing costs. That just isn't realistic." (Commissioner Bierman)

"Higher income personnel who only can't afford the condo conversions. I've said that before. I can't afford a condo even if I were to be the best mechanic in the world. I still couldn't afford those condos. Damned if I would pay that kind of money for people to come and -- I just wouldn't pay it. My work is too hard to pay $1,000 or $2,000 for a condo. You have to be making a prettv good amount to pay that kind of money." (Donald Nietto)

RESPONSE

The revised housing affordabilty discussion, incorporated above on pages 201-206 of this section, concludes that "about two-thirds of project employees would not be able to afford to own housing in San Francisco, although (depending on the number of workers per household) about one-third would be able to do so. Based on the stated assumptions, most project employees, except the lowest-paid clerical workers desiring to live alone, would be able to afford rental housing in San Francisco. These conclusions should be qualified because household circumstances vary. Housing affordability is determined not only by household income and price of housing, but also by equity in existing real estate, savings, debt, access to credit, interest rates, number of dependents, number of wage earners, tastes and preferences."

For example, two clerical employees each able to afford $300 monthly housing costs could together rent a unit for $600 per month.

COMMENT

"From the various discussions on affordability, one can certainly infer that most of the net new housing demand generated by each project within San Francisco will be in the City's rental market, as will be a substantial portion of the demand in the other Bay counties. The information presented should permit this split to be estimated both as a percentage and in actual housing units. This is very important. At the same time, available information should permit the estimates of new housing supply ("Net Housing Stock Growth") to similarly be divided between rental and ownership housing. This is very important as well."

"Table C-2 . . . should be modified to show these amounts with two sub-columns under both "Cumulative Demand - No. Households" and "Net housing Stock Growth - No. Units." Then the "Project Demand as a % of Growth" column should also have two sub-columns for rental and ownership housing. What one can expect to see is a far higher percentage of impact in the rental column than in the ownership column, and this is vital information for the Planning Commission's project mitigation review, and for the formulation of related public policy such as the revision of the Housing Element of the City's Master Plan." (Tony Kilroy)

RESPONSE

Given current market conditions in the Bay Area, characterized by demand which outstrips supply; inflation, resulting in high housing prices for existing and new units; and high interest rates, the number of persons able to purchase a home is limited, and the portion of housing demand placed on the rental market is increased.

The Association of Bay Area Governments (ABAG), "San Francisco Bay Area Housing Activity Report No. 3," May 1981, provides information on housing permits for Bay Area counties from 1978 through 1980. The report gives the number of permits issued by housing type (single-family, multi-family rental, multi-family condominium) and the total number of units which would be constructed if all the permits were acted upon, but does not break the units down by type.

Little new rental housing is being constructed because the rents, which must be competitive with that of existing units, do not provide adequate return on investment. According to the "Report of the Citizen's Housing Task Force" (July 29, 1981), rent levels in San Francisco have not kept pace with the cost of apartment construction. However, an unknown quantity of housing intended for purchase does find its way into the rental market. According to the Department of City Planning report "Condominium Research Preliminary Progress Report" (December 1981), 41 percent of condominium purchasers (of condominiums that received tentative and final map approval since January 1, 1979) have claimed a homeowner's tax exemption, indicating "that the majority of condominiums have been sold to investors, buyers of second homes, or homeowners neglecting to file exemption forms." This indicates that some are rented. Condominiums are the most common type of new housing construction, but the same factors are likely to be true for other types of purchase housing. A breakdown of new housing construction into rental and purchase categories thus may not necessarily provide an accurate picture of the actual quantity of rental housing available.

The ownership/rental housing split in San Francisco is about one-third/two-thirds in 1970 and 1980 census data. If it could be assumed that this split would be applicable in the future, the net housing demand generated in San Francisco by the project would be about 50 ownership units and 100 rental units. Other counties in the Bay Area have a 60 percent 40 percent ownership/rental housing split. Thus, the non-San Francisco housing demand generated by the project would be about 325 units, about 195 ownership units and 130 rental units (based on 1.3 employees per household).

The "Report of the Citizen's Housing Task Force" (San Francisco, July 29, 1981) projects a need for 30,000 dwelling units in San Francisco between 1980 and 1989. This projection was made using a demographic analysis; the report does not distinguish between demand attributable to office development and demand from other sources.

Table C-2 applies the Department of City Planning housing requirement formula for office development to other Bay Area counties. The formula assumes 1.8 downtown workers per household, which is not necessarily true for other Bay Area counties, nor for San Francisco as a whole. U.S. Census data analysed by ABAG staff indicate that 1.8 workers per household would be a high estimate for San Francisco as a whole, and that 1.3 workers per household would be typical for other Bay Area counties./4/

FISCAL FACTORS

Costs for Services

COMMENT

"On page 92, I do not think that you have a particularly good measurement when you say cost per unit of service would be lower than for existing buildings if the unit of service -- and you're talking about the employment on the site -- is going to go up by a factor of ten or twenty times.

Now, the cost per unit of service could go down from $2 to $1.90, but if I need 100 more units of service, the costs are going to go up. Put the costs, not the costs per unit of service, because the City doesn't have a budget based on cost per unit of service; the City has a budget based on the total amount of police, fire, and general government services it provides. I mean, we don't get bills like that." (Sue Hestor)

RESPONSE

Pages 94-95 of the EIR review several analyses of fiscal effects of Downtown development, and concludes, on page 94, that "the project would probably have an initially positive fiscal benefit. Because project revenues to the City would probably increase at a slower rate than would costs, due to Proposition 13 limitations on property tax increases, eventually costs of providing services to new development would be higher than revenues provided (assuming no new revenue sources are found and the rate of new development declines)." Reliable data are not available to estimate total costs of providing police, fire and general government services to an individual site. The total service costs for the site would increase, compared to costs now, if the project were developed and the following sentence is added to the first full paragraph, page 92 of the EIR: "Total costs to serve the site would increase if the project were developed, compared to total costs to serve the site at present, even if costs per unit of service were lower."

Muni Analysis

COMMENT

"I'm incorporating for Carl Imparato... his comments on the figures you use for Muni in the...incremental analysis. The figures and the calculations you are using to calculate Muni budget costs [are] way low. (Sue Hestor)

"We question the use of the marginal cost figures (.42¢ per peak hour ride) in estimating the project's Muni impacts, particularly in light of the project's role as one component in a massive amount of cumulative development. If this figure is used, the additional cost of a p.m. peak hour Muni run would apparently amount to:

.42¢/peak hour passenger x 75 passengers/run x 250 days/run year x
2 runs/day (one in a.m., one in p.m.) = $15,750/run/year

"This seems quite low to us, particularly in light of the statement (456 Montgomery EIR, p. 63a) that (two years ago), the annual cost of an additional run was $53,000. How much does an additional p.m. peak hour Muni run cost? Given the project's generation of additional p.m. peak hour trips, what would additional Muni costs be (based on the peak hour Muni run cost, and considering the project as part of cumulative development)?" (Carl Imparato, incorporated by reference by Sue Hestor in the comment above)

RESPONSE

The estimates of Muni costs revenues and deficits on pages 92-93 of the EIR incorporates the 1981 marginal costs computed by Muni of $.39 deficit per ride. This analysis does not include any major system improvements which may be necessary as a result of cumulative development. Additional capacity analysis by Muni would be required to address this issue in the EIR. The $53,000 figure reflects the total cost of a run, while the $15,750 figure calculated in the comment shows only the portion of the total cost which represents the operating deficit incurred by Muni. This operating deficit was estimated at about $13,000 per run in the 456 Montgomery EIR./5/

NOTES - Employment, Housing and Fiscal Factors

/1/ Danny Lee, Vice President, Bank of Canton of California Building Corporation, memorandum, May 14, 1982."

/2/ The Department of City Planning factor is based on the Economic Practices Manual, California Office of Planning and Research, 1979, page 36.

/3/ Joe Klein, Leasing Manager, Embarcadero Center, telephone conversation, June 11, 1982.

/4/ Patricia Perry, Informational Analyst, Association of Bay Area Governments, telephone conversation, May 6, 1982.

/5/ 333 California Street FEIR, 81.249E, certified June 10, 1982.

6. COMMUNITY SERVICES

FIRE AND EMERGENCY PROTECTION

COMMENT

"On page 52, where you are talking about fire -- and it also comes up in the other places where fire protection comes up -- it is a very Pollyanish approach, that the more of these new buildings that come in, the less the fire hazard is. And that is maybe true, and I say "maybe," on individual fires. It is however, not true for a major fire, a major disaster, or an earthquake, because you are pouring more and more people into a very small area, and this area happens to be fairly close to a residential area.

"Chinatown is a predominantly residential area. How was the fire hazard changed in a major fire? How is it different in an earthquake? Because that is what I am concerned about. I'm not just concerned about, you know, the little mattress burners, or the equivalent thereof, in office buildings. I'm concerned about major disasters, major fires, and major spills of PCB and intrusions into gas lines with drills. So how is the fire hazard changed for fires? How is it changed for spills? How is it changed for threats of explosions in a major catastrophe in the EIR?" (Sue Hestor)

RESPONSE

The construction of high-rise structures does not increase the probability of a disaster occurring and, therefore, poses no potential threat to the residential areas of Chinatown. An increase in the number of high-rise structures would, however, subject a greater number of people to a disaster, should it occur.

Cumulative downtown high-rise development would increase the total number of persons working downtown. This would result in a greater demand for medical care and social services in the area if a disaster were to occur. In addition, street congestion would probably intensify due to the increased number of people concentrated in the Financial District. This would increase interferance with the prompt response of emergency vehicles due to route delays and detours caused by crowded streets.

The effectiveness of the City's emergency response plan would therefore depend, in part, on an informed public's ability to know what to do and where to go in event of an emergency.

The Mayor's Office of Emergency Services (OES) is preparing an emergency response plan, to be implemented in the event of an earthquake or other disaster. The plan will identify roles and responsibilities of government agencies that would be involved in the event of a City emergency. Included in this plan are casualty and mass care centers that have been designated on a district basis and would provide first aid and essential social services to injured and displaced persons.

The Office of Environmental Review and the Mayor's Office of Emergency Services have developed a mitigation measure recommending that project sponsors or building management staff develop evacuation and emergency response plans for all new high-rise buildings and that the plans be coordinated with the City plan. This mitigation measure is included as part of the project and described on page 139, paragraph three, of the EIR.

SEWAGE

COMMENT

"Well, super sewer will take care of that." But I read just a little while ago that San Francisco handles 25 tons of sewage a day. By the time super sewer is done, there will be 75 tons. What does that mean to the rest of the 50 tons? It's going in the Bay." (Donald Nietto)

RESPONSE

Sewage impacts are discussed on pages 100-101 of the EIR; on page 100, the EIR states that "no problem is anticipated in accommodating the wastewater generated by cumulative Downtown development, including this project. The City is in the process of increasing the capacity of its wastewater collection and treatment system to handle projected citywide increases in wastewater generation. The San Francisco Wastewater Management Plan was designed to upgrade wastewater treatment and bring the City sewer system into compliance with Regional Water Quality Control Board requirements." San Francisco generates approximately 500,000 tons of sewage per day.

SOLID WASTE

COMMENT

"On page 101, it is solid waste. You have nothing in there about the need for the trash burner as part of this project and all of the other cumulative projects. And the trash burner is a controversial thing, and I think you need to put it in." (Sue Hestor)

RESPONSE

Page 101, paragraph three, the last sentence is replaced by the following text: "The State Solid Waste Management Board recently approved (May 7, 1982) a proposal for disposal of San Francisco solid wastes at the Altamont landfill site near Livermore, in Alameda County, for five years. If approved by the Mayor and Board of Supervisors of San Francisco, disposal at this site would commence in October 1983, when the present contract with the City of Mountain View expires. The City is also pursuing, as a long-term solution, development of a Resource Recovery Facility (trash burner). The center would burn solid waste in a boiler to produce steam to generate electricity and reduce trash volume. The center would not be needed as a direct result of this project or cumulative development in the Downtown. The proposed resource recovery facility would be responsible for reducing the volume of solid waste targeted for land disposal. Solid waste volumes are expected to decrease over present volumes due to intensified recycling efforts throughout the City. The City of Brisbane (the location of the facility) has prepared an EIR on this facility (June 1980). A subsequent EIR is being prepared to cover proposed modifications."

CHILD CARE

COMMENTS

"It would be helpful since the Bank of Canton has employees now, 65 current employees -- we might get some indication of what their child care needs are. If this one can't do it, I would hope that, if we have a larger group -- their employee list is rather small. But finding out realistically what people downtown need might be helpful." (Commissioner Bierman)

"I'm incorporating for Kay Patchner, who couldn't be here, the child care letter, which is in your files already, and ask you to comment on that." (Sue Hestor)

RESPONSE

The families of the Bank of Canton's 65 headquarters employees include 19 children under 16 years of age. Twelve of these are below teen-age and require daily child-care. Of the 12, three are cared for by a non-working spouse, three are cared for by relatives of the parents, and six are cared for by baby sitters./1/ While this information describes the range of child care needs of Bank of Canton employees, the sample is too small from which to draw generalizations, and is probably not representative of the overall Downtown Office population.

Availability of and need for child care is a social issue which does not require coverage in environmental documents (Cal. Pub. Res. Code Sec 21151 (as amended by SB 803) and 21060.5). A detailed discussion of child care facilities in San Francisco can be found under Public Services in Responses to Comments on the 201 Spear Street Office Building EIR, (EE 80.377, certified May 20, 1982) available for public review at the Office of Environmental Review, 450 McAllister, 5th Floor.

NOTE - Community Services

/1/ Danny F. Lee, Vice President, Bank of Canton of California Building Corporation, telephone conversation, May 21, 1982.

7. TRANSPORTATION, CIRCULATION AND PARKING

CONSTRUCTION EFFECTS ON LEVELS OF SERVICE

COMMENT

"On page 105, you need a table. And this is also on page 109. There are two tables. One is the traffic level at 1984, and one is vehicular traffic and one is pedestrian traffic. The EIR tells you that you're going to be taking lanes out. They're going to be taking out sidewalks, they're going to be taking out traffic lanes during construction. And it mentions that the problems are going to be exacerbated by the fact that Montgomery and Washington [is] going to be under construction at the same time. You need a table in here that tells you how jammed it is going to be on the street and on the sidewalks during the period of construction. Put that in there because that's going to go over your maximum level of worst service during the two- or three-year period because the people won't be able to walk. And it's already pretty bizarre and pretty crowded there. And people aren't going to be able to drive. So I would ask in this and future EIR's that you have a table in there that deals with during construction while you've got all these projects going on, not just 1984 when the construction barricades come down." (Sue Hestor)

RESPONSE

The EIR on page 103, paragraphs two and three, discusses effects of lane closure and sidewalk relocation for construction of the Bank of Canton and the approved Montgomery-Washington project, including changes in Levels of Service. To describe these effects more clearly, paragraph three has been revised to read as follows:

"The approved Montgomery-Washington building, one block north on Montgomery Street, may be under construction at the same time as the project. Concurrent construction activities at both sites could disrupt traffic and pedestrian flows by multiple lane closures, transit stop relocation, sidewalk detours and street excavation. The table below shows the cumulative construction effects on two intersections near the site. Temporary rerouting of sidewalk traffic on Montgomery Street would require an existing bus stop at the Commercial Street corner to be moved or temporarily removed from service. If the sidewalks are relocated into the curbside travel lanes, the pedestrian levels of operation on the sidewalks would not be substantially different than the existing conditions, depending upon the width of walkway provided. Concentrations of truck traffic serving the two sites could have an aggregate effect upon traffic operation, but would probably not worsen the level of service. Truck traffic would generally be limited to non-peak hours.

TABLE 7A: PROJECT EFFECTS ON INTERSECTION LEVELS OF SERVICE DURING CONSTRUCTION

Condition	Montgomery & Washington		Montgomery & Clay	
Existing	0.81	D	0.72	C
Bank of Canton construction	0.81	D	0.90	D/E
plus Montgomery-Washington building construction	0.90	D/E	0.90	D/E

SOURCE: Environmental Science Associates."

NUMBER OF TRAFFIC LANES

COMMENT

"On page 55. When you are talking about traffic lanes in this section, in the Environmental Setting, and in the Impact section, there's not a recognition that traffic lanes narrow at Montgomery Street. There's a funneling effect when you are coming off the freeway at Washington, and one lane spins off at Sansome Street, and the traffic lanes become narrower the closer you go to Chinatown. I mean it is pretty obvious. Anyone who drives those streets knows that it is more difficult to go up Washington Street the other side -- this [west] side of Battery than the other side of Battery, and similarly going on Clay Street, because the street widths are different. And that doesn't even say that there is a merging problem. And I know there is one. I drive there. And there's problems that aren't even recognized in the EIR." (Sue Hestor)

RESPONSE

Between Battery and Kearny Streets, the number of through lanes on Washington Street decreases from four to one. Travel lanes are lost at Sansome and Montgomery by designation as turn-only lanes. The lane constriction occasionally causes delays in traffic operations as vehicles weave and merge into and out of the turn-only lanes. During peak hours, queues of vehicles develop at the intersection of Washington and Kearny and back up into intersections to the east (Washington and Montgomery and Washington and Sansome). The analysis of existing intersection operation shown in EIR Table 9, page 105, includes the effects of lane reduction on Washington Street.

VEHICULAR TRAFFIC

COMMENT

"The EIR should assess the impact of project-related traffic without the Embarcadero Freeway. A study, "I-280 Transfer Concept Program," sponsored by CalTrans, Metropolitan Transportation Commission and City and County of San Francisco, is underway; one of the key alternatives being studied is to demolish the Embarcadero Freeway and its ramps between Beale Street and Broadway.

"The project-related traffic will increase the existing congestion on State Routes approaching and with San Francisco during AM and PM peak-commute hours." (Paul Hughes)

RESPONSE

The transportation analysis assumed that a portion of project-related traffic would use the Embarcadero Freeway access ramps at Broadway and at Clay and Washington Streets. As no parking would be provided on-site, the project related traffic was assumed to disperse throughout the Financial District. If the Embarcadero Freeway were removed, project-related traffic would use remaining access ramps to the Central Freeway that would serve the Financial District, such as Fourth and Bryant or Fremont and Harrison. Removal of the Embarcadero Freeway would cause a redistribution of existing traffic that could be expected to increase traffic congestion at numerous locations in the Downtown area. Any attempt to assess project-related and cumulative impacts without first assessing the overall impacts of Embarcadero Freeway removal would not provide meaningful conclusions. The study referred to in the comment and the EIR/EIS on removal which is in preparation would provide this information when completed.

The second comment reiterates the conclusions of the vehicular impacts discussion on pages 104-106 of the EIR.

PARKING

COMMENT

"There's no parking diagram. And it seems to me the parking situation is vaguely described." (Commissioner Bierman)

RESPONSE

Figure 15, Parking Locations in Survey Area, page 42, Montgomery-Washington Building FEIR, 81.104E, is incorporated by reference into this report. This map illustrates off-street parking areas within about a 2,000-foot radius of the project site. These areas were also surveyed for the Bank of Canton EIR to determine the availability of off-street parking in the site vicinity (see Section III, Environmental Setting, page 57, paragraph one).

The cumulative parking discussion is found on Section III., Environmental Setting, pages 106-107 of the EIR. The discussion concludes that a large deficit in long-term parking would occur in the Downtown area as a result of cumulative development including the night. This conclusion presumes the same modal split (percentage of users of transit and private cars) as exists at present. The lack of downtown parking would increase use of transit, as stated at the top of page 107. Muni and other transit agencies are planning increases in capacities that would accommodate changes in ridership patterns resulting from the parking deficit. These capacity increases are described in the 388 Market Street Building Draft EIR, 81.195E, pages 91-94.

TRANSIT

COMMENT

"Under [transit], it is helpful to have the photographs. I think they ought to be in the main section of the EIR because a lot of people don't look at the appendices, and they are pretty significant.

"I think we need to start having in EIRs the time people are going to have to spend going to and from work at peak hour when it is so crowded and they have to stand in uncomfortable conditions. We also need to know how many people are passed by, how many people have to wait for two or three buses on significant intersections -- or significant bus and streetcar lines. The transit tables I don't think adequately explain overcrowding.

"I just don't feel the transit situation is really portrayed as uncomfortable and as crowdwd and as needful of remedy as it should be." (Commissioner Bierman)

RESPONSE

Figure D-8, Appendix D of the EIR, pages 283, includes photographs of peak Muni passenger loading conditions, intended to illustrate qualitatively, the existing congestion on transit lines. The photographs are included in the appendix because they are not directly the result of project impacts.

From observations made along Market Street both above ground and underground in the Muni Metro stations, from 3:30 p.m. to 6 p.m. on Thursday, May 8, 1982, Muni appears most crowded during the outbound peak period at about 5 p.m. to 5:15 p.m. At this time, Muni Metro cars as far east as the Embarcadero Station are crowded to the point where waiting patrons cannot board outbound cars. During this 15-minute period, the wait appeared to be about 10 minutes in the Muni Metro. The wait is longer on stops west of the Embarcadero Station on Market Street. More people collect in these stations because trains that arrive there are already too crowded to board. The wait at Powell Street and Civic Center was observed to be up to 20 minutes and at Van Ness Station up to one-half hour before patrons were able to board.

Outbound buses above ground were observed to reach capacity at about Powell Street; waiting time west of this point is estimated (based on observation) to be about 15 minutes.

No check was made to verify if the observed operations were in accordance with scheduled operations to determine if the day observed was a typical day.

Pages 188-193 of this section discusses potential updated cumulative development data that indicate that Muni load factors described in Table 11, page 112 of the EIR would increase by about 20 percent. This increase in patronage would add to the waiting time at current capacity. Muni's Five-Year Plan proposes measures to keep pace with the increase in demand: 1) the use of the Muni Fast Pass will be allowed on BART, transferring some ridership to BART; 2) use of faster vehicles with greater seating and standing capacity in the Muni Metro, along with a loop extension at the foot of Market Street; and 3) use of articulated buses to increase capacity on above-ground lines.

COMMENT

"Page 210 in the peak Muni analysis -- it doesn't have an explanation, as it usually does, of what one period represents. If it's in there, I didn't find it." (Commissioner Bierman)

RESPONSE

EIR Table D-7, (now page 282), Projected 1984 Peak Muni Analysis, has been retitled, to read "Projected 1984 P.M. Peak-Hour (4:30-5:30) Outbound Muni Analysis."

8. AIR QUALITY

COMMENT

"There is a building nearby, and I think it is the Perini Building...near the Transamerica Building that has operable windows. Recently there have been articles in the paper about illness and ailments -- if not illness, at least ailments in people in high-rises because of the lack of fresh air. And I think we're going to have to start, in the name of Mr. Starbuck...looking at whether people would be healthier if we had operable windows and an opportunity for people to get regular air when it's a day that is suitable." (Commissioner Bierman)

RESPONSE

Energy conservation efforts have added to air pollution problems in recent office structure design. Mechanical ventilation that requires sealed windows to operate efficiently, and the increased use inside buildings of chemicals and equipment of which the long-range safety is untested presented potential health problems to occupants of newly constructed buildings.

There are many chemicals which can present problems in modern buildings. Asbestos, a carcinogen, can be introduced in the air from insulation or acoustic tiles. Formaldehyde, which can cause respiratory problems as well as being a potential carcinogen, is found in particle board, insulation carpeting and other building materials. Methanol, an eye and skin irritant which can also affect the central nervous system, is found in duplicating machine fluids. Carbon monoxide, a product of automobile engine combustion responsible for ill effects ranging from dizziness to death can enter a building through the air conditioning system./1/ The chance of chemical buildup is increased with a reduction in the number of air changes per hour. For example, potential problems are greater with only one air change per hour. This risk is substantially reduced in a building with four or five air changes per hour.

The project sponsor has proposed closed-window ventilation to maintain the efficiency of project heating and cooling systems. The project ventilation system and rate of air changes would be controlled by project occupancy. The project would be designed to provide 6.5 air changes per hour at maximum occupancy and about two air changes per hour at minimal occupancy./2/ Therefore, potential health impacts in the interior environment would not be expected to be a problem.

NOTE - Air Quality

/1/ "When Your Office Makes You Ill," San Francisco Chronicle, April 27, 1982.

/2/ Richard Tobias, project architect, Skidmore, Owings and Merrill, telephone conversation, May 24, 1982.

9. ENERGY

COMMENT

"How many units of power [is it] going to [take to] keep that thing warm, to keep the people occupied in there -- just how much do we have? If we run out of fossil fuel, which I doubt is fossil fuel, and return to nuclear fuel?" (Donald Nietto)

RESPONSE

Project energy consumption estimates are described on pages 119-124 of the EIR. In summary, the project would consume approximately 2.7 million kilowatt-hours of electricity and about 1.86 million cubic feet of natural gas per year. The sources of energy for PG&E are covered on page 60 of the EIR. The second and third full paragraphs on page 60 states "...PG&E obtains a portion of its electrical energy from renewable resources, including geothermal and hydroelectric power, but will meet new demands for energy primarily by increasing the use of non-renewable coal, oil, natural gas, and nuclear fuels. In response to a directive of the State Public Utilities Commission, PG&E will also be required to increase generating capacity from co-generation projects, which develop electricity in combination with industrial processes that already use fossil fuels as a source of heat. PG&E anticipates the construction of additional geothermal plants and increased purchases of electricity from other utilities; this power would come primarily from hydroelectric and other plants in the state of Washington."

10. GEOLOGY, SEISMICITY AND HYDROLOGY

CONSTRUCTION EFFECTS

COMMENT

"Grant Dehart [Executive Director, the Foundation for San Francisco's Architectural Heritage]... wants me to raise the question about the lowered water table when dewatering is going on for the site as it might affect the pilings in the Old Sub-Treasury. And he's concerned, as I'm concerned because I couldn't find it in here either. There's kind of a cavalier passing over. There's going to be dewatering, and there's clays under the site, et cetera. But the Sub-Treasury probably doesn't have pilings that go all that deep. I mean it was only a four-story building when it was at its tallest. And I think you need to have in the EIR some real solid information on how ground dewatering of the site is going to affect or may affect the pilings under the Sub-Treasury." (Sue Hestor)

"Mr. Han [owner of 635 Clay Street] is concerned that excavation next to his property will damage his building, which is an old brick structure. We trust that you will take appropriate measures to protect the owners of adjacent property from such damage." (F. Thomas Huster, attorney for Frank Han)

RESPONSE

If the Old Sub-Treasury Building foundation is supported on wooden piles, dewatering of the project basement could expose these piles to air and result in deterioration of the wood and structural failure. This would only be expected to occur if there were permanent dewatering or extended periods of temporary dewatering. Neither is proposed as part of the project. Because the project office tower basement would be excavated to an elevation below that of the existing Old Sub-Treasury Building basement, the foundation of the Sub-Treasury would be underpinned to minimize movement or damage to that structure. This measure would also prevent substantial settlement due to dewatering or other construction activities./1/

EIR Section V., Mitigation Measures, page 138, paragraphs one and two, describe mitigation measures proposed as part of the project to minimize the potential damage to adjacent buildings during project construction.

NOTES - Geology, Seismicity and Hydrology

/1/ Eddy Lau, Project Geologist, Dames + Moore, telephone conversations, May 13, 1982 and June 15, 1982.

11. MITIGATION MEASURES

LAND USE AND ZONING

COMMENT

"Specifically when you look at page 47, which is the architectural survey of the buildings, I note that 743 Washington is given a high 3 rating by the Department of City Planning, and that is a branch bank of Bank of Canton. It is right next to Portsmouth Square between Kearny and Grant on the... southwest corner of the street there that goes along the garage....

"Do they own it? If they own 743 Washington Street -- and that is a very highly rated building, and when you look at the map, you will find out it is one of the few buildings that are architecturally meritorious in that part of Chinatown -- If they own 743 Washington, they should be required as a condition of this building as well to commit themselves to preserve 743 Washington as a mitigation. If they own it, preserve it, let's have that building locked in, a nice landmark building." (Sue Hestor)

RESPONSE

The Bank of Canton was founded in 1937, at the proposed project site. The bank opened its first branch, the Chinatown branch, at 743 Washington Street, the former Chinese Telephone Exchange, in 1961. As part of its forty-fifth anniversary celebration in 1982, the bank sponsored a photographic exhibition of the Chinese Telephone Exchange at its headquarters. The bank considers the Chinese Telephone Exchange as a precious asset and is committed to its preservation./1/

SHADOW EFFECTS

COMMENT

"I want you to look at requiring some open space mitigation. I think that when you have the full information on the [shadow] effect on Portsmouth Square, you will have no alternative but to look at some open space mitigation from this developer. And the mitigation might be building setbacks so that they don't pass the shadows; it might be acquiring some space that is sunny for people to use. But Chinatown has the most severe problem in the entire City in terms of having usable open space, sunny, usable open space. And I think you've got to know those effects and look at them and weigh them, and if they are going to hurt people that use that open space, you've got to mitigate and mitigate in terms of open space -- not mitigate it in terms of transit, because the transit won't satisfy the people trying to use some open space during the day." (Sue Hestor)

RESPONSE

The project would have shadow effects on Portsmouth Square during fall and spring months generally between the hours of 7 a.m. and 8 a.m. The project would not cast shadows on Portsmouth Square during mid-morning and mid-afternoon hours when it is most heavily used. (See also discussion of shadow impacts on pages 164-170 of this section).

HOUSING

COMMENT

"I'm asking that you have housing mitigation that requires the construction in Chinatown of housing to accommodate the demand created by this project matched according to the income levels -- not 601 Montgomery -- the income levels of the Bank of Canton employees which you do have in here. And I'm asking for it to be constructed in Chinatown and not be some contribution to a mythical City fund which doesn't exist, because Chinatown has had the most direct impacts of this expansion to the north. They have borne the brunt, along with North Beach, of expanded commercial activity. And I think it's time that they get some benefits out of it. And if you're going to do housing mitigation for ... employees created on site and the secondary impact [it should be] in Chinatown. If the Bank of Canton can't provide housing, no one can." (Sue Hestor)

RESPONSE

The Bank of Canton has made a financial commitment, discussed on pages 131-132 of the EIR, to the City Office Housing Production Program investment pool to reduce housing costs for home-buyers through a shared-appreciation program. This program was developed by the Mayor's Office of Housing and Community Development to mitigate City-wide housing demand generated by new office development in San Francisco. The bank would contribute $6,000 per unit, or $930,000 for the 155 net housing unit demand expected to be generated by the project. The Bank of Canton cannot specifically direct the application of this program to a particular geographic area. Page 132 describes alternative housing mitigation measures the Bank of Canton could implement if the shared-appreciation program were not implemented by the City.

TRANSPORTATION

COMMENT

"I think you need an absolute binding requirement of buying in and fully mitigating the entire cost of Muni, not a speculative mitigation measure that might come into effect maybe one of these days if all of the lawsuits are finally settled." (Sue Hestor)

RESPONSE

The project sponsor, as stated on page 132, paragraph three, of the EIR, is committed to proportional participation in funding of Downtown transit improvements through measures adopted by the Board of Supervisors. The sponsor would not propose commit funds for such improvements in the absence of a legal, equitable mechanism. The City Planning Commission's action can not preempt the Board of Supervisor or the county in requiring payment for transit funding.

COMMENT

"On page 129, I would like to ask for mitigation measures to be considered -- that from the BART deficit, and also you need to measure first the AC Transit deficit and the Golden Gate Bridge District deficit. Measure it and mitigate it." (Sue Hestor)

RESPONSE

A-C Transit, and Golden Gate Transit do not receive direct subsidies from taxes collected in San Francisco. They receive federal and state subsidies. Bay Area residents contribute to these transportation systems through federal taxes, bridge tolls, and state gasoline and sales taxes paid in the counties if purchase. Future modifications in the federal and state allocations and in fare structures cannot be forecast. The average net cost not covered by fares per A-C Transit passenger is about $0.72 cents per trip./3/ Cost of the project for the 710 net employees would be about $19,000 annually. (710 net employees x eight percent A-C Transit riders x 468 rides per year x $0.72 deficit per ride) The average net cost per Golden Gate Transit passenger is $1.14./4/ Based on this figure, the net cost of the project would be about $18,900. (710 net employees x five percent Golden Gate Transit riders per year x 468 rides per year x $1.14 deficit per ride) The exact proportion of these transit agency deficits that would be paid to respective agencies by workers in the proposed project, or downtown office workers in general, cannot be estimated because the amount of tax revenues that each employee would contribute to funding sources cannot be determined. The distribution of riders on regional transit agencies is from Attachment 1 of the Guidelines for Environmental Impact Review, Transportation Impacts, San Francisco Department of City Planning, October 1980.

CONSTRUCTION NOISE

COMMENT

"Mr. Han [owner of 635 Clay Street] has the same noise concerns which have been raised by the KABL radio station. We request that the same noise mitigation measures be applied to Mr. Han's building as are applied to the KABL studios. Particularly, we feel that it would be appropriate to insulate the skylight of Mr. Han's building." (F. Thomas Huster, attorney for Frank Han)

RESPONSE

The Bank of Canton has reviewed noise mitigation measures described on pages 136-137 of the EIR with KABL radio station at 632 Commercial Street and proposed the following, revised measures to replace paragraph five, page 136:

"The project sponsor and contractor would reduce or suspend operations as necessary during one hour pre-taping programs, if a mutually agreeable time were agreed upon, or the project sponsor would pay up to $100 in expenses per session for KABL to move its recording operation to another site. Upon a 24-hour notification by KABL, the sponsor would cease construction activities during taping of spot commercials. During demolition, the wall adjacent to the KABL studios would be removed at a time when recording was not in progress. The project sponsor would install barriers over the top-floor skylights in order to minimize the danger of falling material during construction and reduce the transmission of construction noises. As required, temporary lighting would be installed in the affected offices./3/ Similar barriers would be provided on the 635 Clay Street building skylight."

The following footnote is added to Section V., Mitigation Measures, page 139 of the EIR:

"/3/ Dr. Lawrence J. Lau, Vice Chairman, Bank of Canton of California Building Corporation, letter to William Clark, General Manager, Station KABL, May 27, 1982."

GEOLOGY, SEISMICITY AND HYDROLOGY

COMMENT

"P. 11, 2nd para: Add ' . . .damage to existing buildings including but not limited to damage to the Old Subtreasury Building, a designated City Landmark, by dewatering of the foundation or other act which might result from excavation.'"

"P. 11, 3rd para. Add: 'The Environmental Review Officer and President of the Landmarks Preservation Advisory Board will be advised of findings during the monitoring of water table levels, settlement and subsidence.'" (Jonathan Malone)

RESPONSE

Page 11, paragraphs two and three, and page 138, paragraphs four and five, are revised to read as follows (The references to the project sponsor's or the contractors' liability for damage to adjacent buildings in the text in the DEIR have been deleted. Responsibility for such damage, if it occurred, would be determined under appropriate administrative or legal procedures, based on the circumstances of the damage.):

"The project sponsor would require the project contractor and sub-contractors to obtain a Faithful Performance and Payment Bond, if proper financial capability is not evident, to be responsible for any damage to the Old Sub-Treasury Building, a designated City Landmark, by dewatering of the foundation or other act which might result from excavation.

"Groundwater observation wells would be installed for monitoring the level of the water table and other instruments would be emplaced to monitor potential settlement and subsidence. The City would require a lateral and settlement survey to monitor any movement or settlement of surrounding buildings and adjacent streets during the dewatering. Control lines and benchmarks would be established for monitoring horizontal and vertical movement. Costs for the survey and any necessary repairs to services under the streets would be borne by the contractor. The Environmental Review Officer and President of the Landmarks Preservation Advisory Board will be advised of findings during the monitoring of water table levels, settlement and subsidence."

NOTES - Mitigation Measures

/1/ Dr. Lawrence J. Lau, Vice Chairman, Bank of Canton of California Building Corporation, memorandum, May 18, 1982.

/2/ Danny F. Lee, Vice President, Bank of Canton of California Building Corporation, memorandum, May 14, 1982.

/3/ Ted Reynolds, Senior Planner, A-C Transit, telephone conversation, March 15, 1982.

/4/ Peter Dyson, Senior Planner, Golden Gate Transit, telephone conversation, March 15, 1982.

12. ALTERNATIVES TO THE PROPOSED PROJECT

DOWNTOWN EIR ALTERNATIVES

COMMENT

"In your alternatives, analyze every alternative that is being considered in the Downtown EIR -- how does this project match up against them? How would it violate them -- in this EIR, not just Guiding Downtown Development. You can't preordain that that's the conclusion you're going to come up with, because that would be a violation of CEQA, and I'm sure you don't want to do that. So look at all of the alternatives and discuss them in this EIR." (Sue Hestor)

RESPONSE

The Downtown EIR assesses a series of alternative planning possibilities for the Downtown area and is currently in preparation. At this time, no City policies regarding mitigation measures related to downtown development have been or could be formulated or approved as a result of the Downtown EIR process. The Downtown EIR, when completed, is expected to present environmental analysis of a series of future policy options for the overall development of the Downtown: specific policy changes, therefore, cannot be reviewed or adopted until after the EIR is certified.

The EIR on this specific project does not, and need not, evalute the overall downtown planning possibilities. The alternatives chapter of the EIR discusses project alternatives which relate to existing City policies. The on-going alternative analysis in the Downtown EIR will cover several possible futures and encompass numerous policies which have not yet been approved by the City. It is inappropriate to draw comparisons between existing policies and speculative future policies which may be altered or amended several times before they are proposed for approval.

DESIGN ALTERNATIVES

COMMENTS

"And I think that those flat facade designs are increasing the wind velocity. And an alternative design with some architectural interest and with some stepping-backs and something other than another refrigerator box might not only mitigate the visual aspects of the building, but might mitigate some of the wind and might mitigate some of the shadow. So that is specific Alternative No. 1. And on the record, I think this building is ugly above the second floor.

"I think you need to look at a redesign of the building to mitigate it, and I didn't find the mitigations or the alternatives helpful on this. I think your staff should sit down with the developer, find which would be the least windy solution, which would hopefully also be the best design, and also the most sunlight. I'm optimistic that we can make some trade-offs, because you've got a wind problem, you've got an ugliness problem, and you've got a shadow problem right now. Maybe we can have a design that isn't a refrigerator box that can cut down on these.

"One of the things I am asking for is an alternative, an alternative design that is not one of those boxy little buildings. They're interesting at the first- and second-floor level. I guess that's the second floor or mezzanine. But they are boring as hell up above that." (Sue Hestor)

RESPONSE

An alternative to the proposed project incorporating setbacks was considered. Alternative 3, EIR pages 147-151, illustrated in Figure 28, page 144 would incorporate two setbacks. As stated on page 150, fourth paragraph, "Columns to support the building setbacks would pass through the Sub-Treasury Building with this alternative, which could interefere with development of that building as a museum and reduce the architectural integrity of the interior of a designated landmark."

This alternative would not have substantially different wind effects from those of the proposed project. The wind effects of greater bulk at street level would be balanced by the reduced volume at upper levels./1/

The project sponsor has also proposed Alternative 5, a revised roof design with setbacks, because of anticipated positive visual effects of the alternative. The sponsor wishes this alternative to be considered as the a project design. (See Section VII., Alternatives, Figure 29, page 155 and pages 157-158 of the EIR.) New EIR Figures 29a and 29b, on pages 157a-b, and on pages 226-227 of this section, provide elevation drawings of this alternative.

An alternative that would prevent project shadows on Portsmouth Square at 7 a.m. in spring and fall would have to be about 150 feet tall. An alternative that would not cast new shadows on Redwood Park after 3 p.m. in spring and fall months would have to be about 230 feet tall in the northern third of the tower. (See also discussion on Shadow Effects on pages 169-170 of this section).

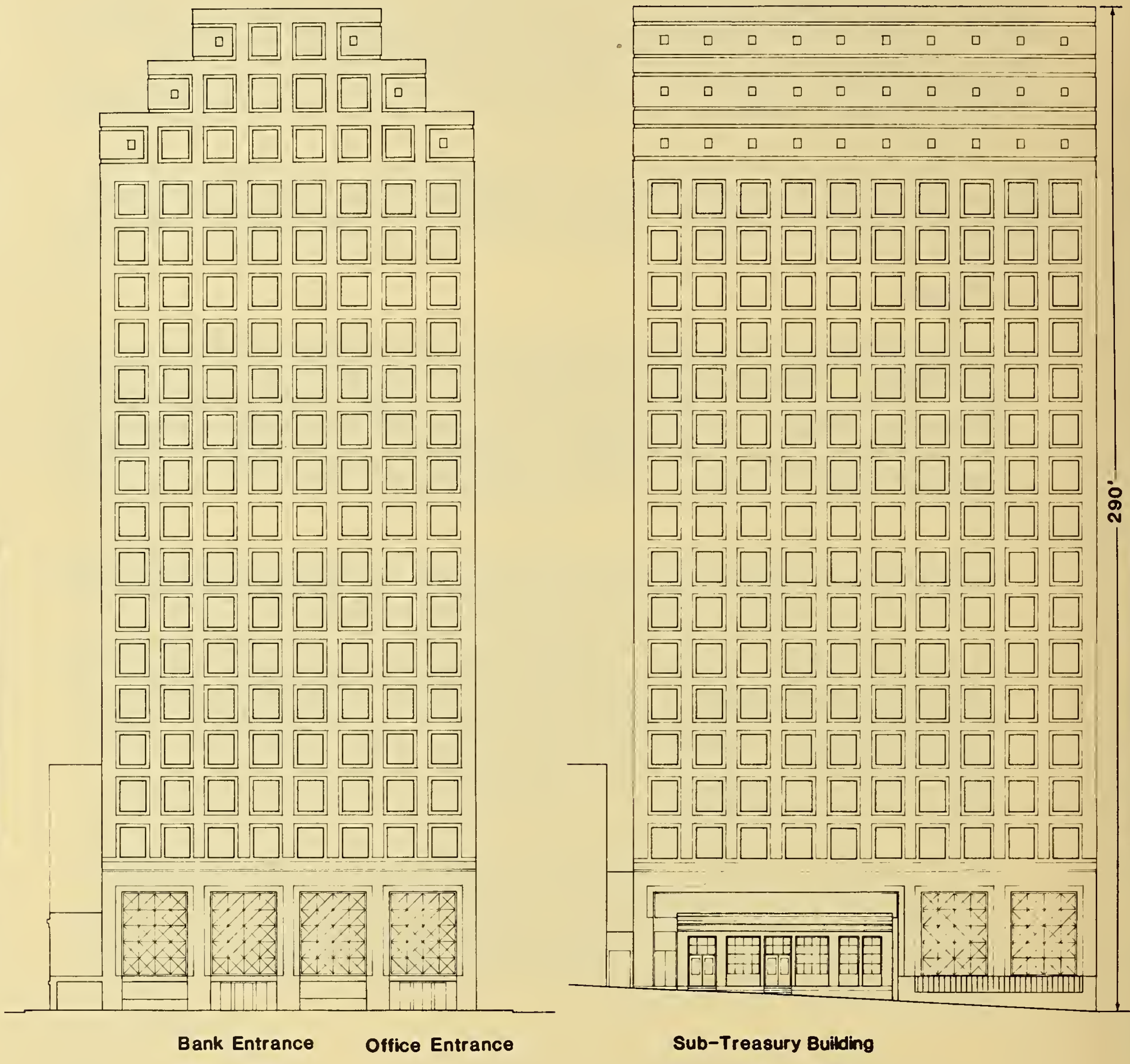
NOTES - Alternatives to the Proposed Project

/1/ Bruce R. White, Ph.D., telephone conversation, January 29, 1982.

13. STAFF-INITIATED TEXT CHANGES

In Section I, Summary, page 14 of the EIR, replace the last sentence with:

"After publication of the Draft EIR and prior to certification, this alternative has become the proposed project because in the sponsor's opinion its positive visual effects justify the additional structural costs."

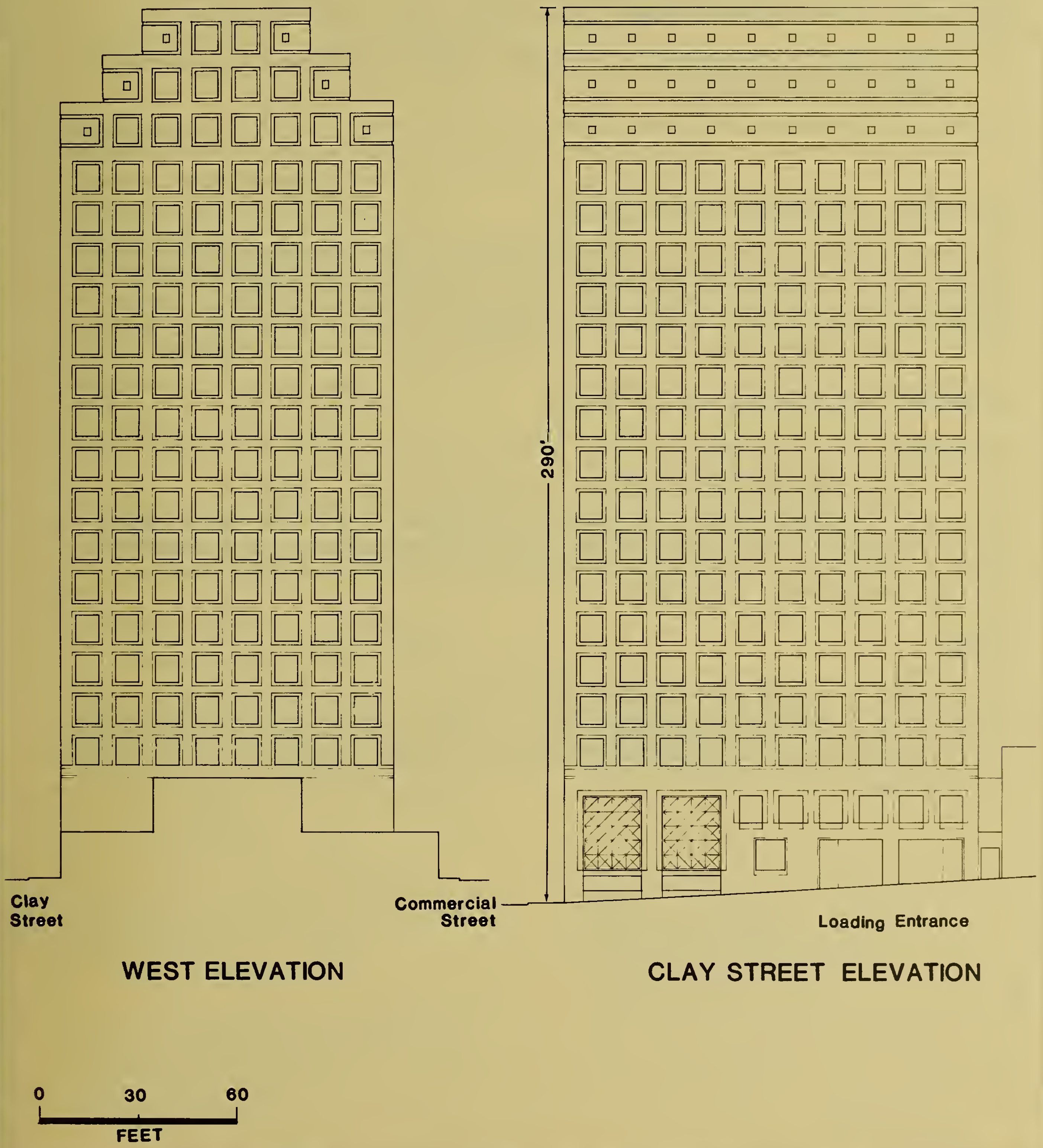


MONTGOMERY STREET ELEVATION

COMMERCIAL STREET ELEVATION

SOURCE: Skidmore, Owings & Merrill

FIGURE 29a: Revised Roof Design – Commercial Street and Montgomery Street Elevations



SOURCE: Skidmore, Owings & Merrill

FIGURE 29b: Revised Roof Design - Clay Street and West Elevations

Section VI., Significant Environmental Effects, pages 140-141 of the EIR, has been revised to read as follows:

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

EMPLOYMENT, HOUSING AND FISCAL FACTORS

The project would result in an increase in office space of about 183,000 gross square feet. The project would cause the loss of 800 gross square feet of retail space and 22 residential hotel units (now vacant). The project would result in a net increase in on-site employment of about 710 employees, which would create a demand for about 155 new housing units in San Francisco.

TRANSPORTATION, CIRCULATION AND PARKING

The project would include no parking spaces, and would generate a demand for about 240 parking spaces per day.

The project would contribute to cumulative impacts on Muni and other transit agencies; the project would increase transit ridership and transit loading by up to 0.3 percent on non-Muni systems and about one percent during the peak-hour on the Muni systems.

ENERGY

Projected total energy use by the project would be about 52 billion Btu at-source per year. The project would also have an associated consumption of about 160,000 gallons of gasoline for project-generated vehicular traffic. Total project energy consumption would be equivalent to about 9,170 barrels of oil per year.

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San Francisco, Ca 94109

Telegraph Hill Dwellers Association
426 Vallejo Street
San Francisco, California 94133
Attn: Mr. Jim Augustino

Paul Thayer
1033 Stanyan
San Francisco, CA 94217

Timothy A. Tosta
333 Market Street, Suite 2230
San Francisco, CA 94105

Telegraph Hill Neighborhood Association
660 Lombard Street
San Francisco, California 94133
Attn: Mr. Peter Gibb

Tenants & Owners Development
Corporation
177 Jessie Street
San Francisco, California 94105
Attn: Mr. John Elberling

Albert Tetzlaff
191 Dalewood Way
San Francisco, CA 94127

Campeau Corp. of California
681 Market Street
San Francisco, CA 94105
Attn: Jeff Vance

Steven Weicker
899 Pine Street, #1610
San Francisco, CA 94108

Marlin Wilson
1605 Novato Blvd.
Novato, CA 94447

Laurel Wright
23 Sunnyhill Way
Pittsburg, CA 94565

ABUTTING PROPERTY OWNERS

Martin Brown
c/o Empire Properties Inc.
305 Montgomery Street
San Francisco, California 94104

Crow-Spieker-Cahill
2180 Sand Hill Road
Menlo Park, California 94025
Attn: Mr. Warren E. Spieker, Jr.

Gee On
1717 Stockton Street
San Francisco, California 94133

Chung F. & Josephine C. Han
KC Lee Investment Co.
1141 Stockton Street #101
San Francisco, California 94133

Thomas Han
c/o F. Thomas Huster
Box 18887
San Francisco, CA 94118

Kam Cham Overseas Inc.
c/o Lew & Fong
626 Grant Avenue #202
San Francisco, California 94108

Lurie Co.
555 California Street #5100
San Francisco, California 94104

Dennis & Lucinda Quon
6031 Country Club Drive.
Rohnert Park, California 94928

Harriet E. Redinger
615 Sacramento Street
San Francisco, California 94111

Charles A. Shumate
Virginia S. Hansen
1901 Scott Street
San Francisco, California 94115

Transamerica Title Insurance Co.
Premier Insurance Co.
600 Montgomery Street
San Francisco, California 94111
Attn: Mr. John Hall

Utah International Inc.
550 California Street
San Francisco, California 94108

Patricia F. Woods
Paul B. Fay, Jr.
Anita M. Fay
c/o Fay Improvement Co.
3766 Clay Street
San Francisco, California 94118

Yee Shaw Yan Benevolent Assoc.
c/o Dowd Brothers
756 Sacramento Street
San Francisco, California 94118

MEDIA

San Francisco Bay Guardian
27000 - Nineteenth Street
San Francisco, CA 94110
Attn: Patrick Douglas
City Editor

San Francisco Chronicle
925 Mission Street
San Francisco, California 94103
Attn: Mr. Marshall Kilduff,
Mr. Allen Temko

San Francisco Examiner
110 Fifth Street
San Francisco, California 94103
Attn: Mr. Gerald Adams

San Francisco Progress
851 Howard Street
San Francisco, California 94103
Attn: Mr. Mike Mewhinney

The Sun Reporter
1366 Turk Street
San Francisco, CA 94115

LIBRARIES

Institute of Governmental Studies
1209 Moses Hall
University of California
Berkeley, CA 94720

Environmental Protection Agency Library
215 Fremont Street
San Francisco, California 94105
Attn: Ms. Jean Circiello

Golden Gate University Library
536 Mission Street
San Francisco, California 94105

Hastings College of the Law Library
198 McAllister Street
San Francisco, California 94102

San Francisco Public Library
Main Branch, Documents Section
208 Larkin Street
San Francisco, California 94102
Attn: Faith Van Liere

San Francisco Public Library
Business Branch
530 Kearny Street
San Francisco, California 94104

San Francisco State Library
Government Publications Department
San Francisco State University
1630 Holloway Avenue
San Francisco, CA 94132

Stanford University Library
Government Documents Section
Stanford, California 94305

University of San Francisco
Gleeson Library
Golden Gate and Parker Avenues
San Francisco, California 94115

SAN FRANCISCO

CITY PLANNING COMMISSION

RESOLUTION NO. 9454

WHEREAS, A draft environmental impact report, dated March 26, 1982, has been prepared by the Department of City Planning in connection with

> EE80.296: Bank of Canton Headquarters. Demolition of 4 buildings including 531-541 and 555 Montgomery (a combined 2-story and 4-story building); 619-623 Clay (a 4-story building with commercial space and 22 vacant residential hotel units); and 631 Clay (a 4-story office building). Retention of the Old Sub-Treasury Building (City Landmark No. 34) and construction of a 282-foot-tall, 18-story office building including 230,440 gross sq. ft. The ground floor would contain the main branch of the Bank of Canton. Requiring a Certificate of Appropriateness, Discretionary Review, a Permit to Convert, and required building permits.

on the property described as follows:

> 555 Montgomery Street, southwest corner of Clay and Montgomery Streets; Lots 1, 2, 3, 4, 29, 46 and 47 in Assessor's Block 227.

WHEREAS, The Department duly filed a notice of completion of the draft report with the Secretary of the California Resources Agency, gave other notice and requested comments as required by law, made the report available to the general public and satisfied other procedural requirements; and

WHEREAS, The City Planning Commission held a duly advertised public hearing on said draft environmental impact report on April 29, 1982, at which opportunity was given for public participation and comments; and

WHEREAS, A final environmental impact report, dated July 15, 1982, has been prepared by the Department, based upon the draft environmental impact report, any consultations and comments received during the review process, any additional information that became available, and a response to any comments that raised significant points concerning effects on the environment, all as required by law; and

WHEREAS, On July 15, 1982, the Commission reviewed the final environmental impact report, and found that the contents of said report and the procedures through which it was prepared, publicized and reviewed comply with the provisions of the California Environmental Quality Act, the Guidelines of the Secretary for Resources and San Francisco requirements;

THEREFORE BE IT RESOLVED, That the City Planning Commission does hereby find that the Final Environmental Impact Report, dated July 15, 1982 concerning

> EE80.296: Bank of Canton Headquarters

is adequate, accurate and objective, and does hereby CERTIFY THE COMPLETION of said Report in compliance with the California Environmental Quality Act and the State Guidelines;

CITY PLANNING COMMISSION

RESOLUTION NO. 9454
Page Two

AND BE IT FURTHER RESOLVED, That the Commission in certifying the completion of said Report does hereby find that the project as proposed will have a significant effect on the environment in that the proposal will create a specific demand for housing from the project itself and will contribute to the cumulative increase in transit ridership, pedestrian and vehicular traffic and parking demand produced by development proposed, approved and under construction in the downtown area.

I hereby certify that the foregoing Resolution was ADOPTED by the City Planning Commission on July 15, 1982.

Lee Woods, Jr.
Secretary

AYES:	Karasick, Kelleher, Klein, Nakashima, Rosenblatt, Salazar
NOES:	Bierman
ABSENT:	None
PASSED:	July 15, 1982

XII. APPENDICES

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APPENDIX AA.

SAN FRANCISCO DEPARTMENT OF CITY PLANNING 100 LARKIN STREET · SAN FRANCISCO, CALIFORNIA 94102
(415) 552-1134

NOTICE THAT AN
ENVIRONMENTAL IMPACT REPORT
IS DETERMINED TO BE REQUIRED

Date of this Notice: December 5, 1980

Lead Agency: City and County of San Francisco, Department of City Planning
100 Larkin Street, San Francisco, CA. 94102

Agency Contact Person: Sally E. Maxwell Tel: (415) 552-1134

Project Title: EE80.296: Bank of Canton Headquarters

Project Sponsor: Bank of Canton

Project Contact Person: Gerald Veverka
MBT Associates

Project Address: 555 Montgomery Street

Assessor's Block(s) and Lot(s): Block 227, Lots 1, 2, 3, 4, 29, 46 and 47.

City and County: San Francisco

Project Description: Demolition of 7 buildings including a designated landmark and construction of a 14-20 story office and bank building with approx. 230,500 sq. ft. of area and 40 off-street parking spaces. Would require Discretionary Review ~~(over)~~

THIS PROJECT MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED. This determination is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15081 (Determining Significant Effect), 15082 (Mandatory Findings of Significance) and 15084 (Decision to Prepare an EIR), and the following reasons, as documented in the Initial Evaluation (initial study) for the project, which is on file at the Department of City Planning: The project would include the 1) demolition of seven buildings, one of which is a designated San Francisco landmark (#34), located on the site of a designated State Historical Landmark (#87), 2) construction of a 14-20 story office building with an area of approximately 230,500 gross sq. ft. Location of the project would be on the west side of Montgomery Street between Clay and Commercial Streets.

The project site is entirely covered by several buildings which would be demolished and are described below:

555 Montgomery-604 Commercial - these four 2-4 story high structures which front on Montgomery have been remodeled and functionally integrated. On the ground floor are the Bank of Canton's public hall and offices, and on upper floors are additional offices

608-610 Commercial Street - This one story building over basement is a designated San Francisco City landmark (#34) and the site is a designated Sate Historical landmark (#87). The building is integrated with the 555 Montgomery Street complex. Bank offices are on the first floor while storage and employee support space are in the basement. The facade gives the appearance of an irregular classical colonnade with all six high wide rectangular openings being closed in the glass panes; one of these contains the entrance.

631 Clay Street - This four story office building with basement ~~has a radio station which fronts onto Commercial~~ Street.

(over)

Deadline for Filing of an Appeal of this Determination to the City Planning Commission: December 15, 1980.

An appeal requires 1) a letter specifying the grounds for the appeal, and 2) a $25.00 filing fee.

cc: Bank of Canton
Gerald Veverka
Neighborhood Groups
100 Larkin Street
Abutting Property Owners

Alec S. Bash
Alec S. Bash, Environmental Review Officer

ER5 6/80

Description Cont'd.: Certificate of Appropriateness and Building Permits.

# # # # #

619-621 Clay Street - Upper floors of this 3-story structure include a vacant rooming house while the ground floor has a real-estate insurance office and a restaurant.

The project would also include the construction of a 14-20 story office building which would be permitted in the C-3-O (Downtown Office District) zoning designation. Since building plans have not yet been submitted, conformance to bulk, floor area ratios and other code requirements can not yet be evaluated. The building would be approximately 230,500 gross sq. ft. On the ground floor would be the office lobby and public banking facilities of the Bank of Canton, and on upper floors would be offices. Forty off-street parking spaces would be provided. Employee occupancy would increase on the site by approximately 524 people to a total of 680 people.

To demolish all structures would require a demolition permit from the Bureau of Building Inspection (BBI) and to demolish the designated landmark would additionally require a Certificate of Appropriateness from the City Planning Commission (CPC). Presently the rooming house could not be demolished due to a moratorium (File No. 384-79-2, Ordinance, No. 471-80) prohibiting the loss of residential hotel units. The moratorium was enacted in November, 1979. The expiration date has been extended twice and is presently scheduled to expire on May 31, 1981. Construction would require Discretionary Review by the CPC and a building permit from BBI.

The project site is in the financial district at the edge of Chinatown. Surrounding land uses include numerous banking facilities and offices, several restaurants, a radio station, and the Transamerica Pyramid. In many of the older buildings residences are located on upper floors.

Historic resources of the site, as previously mentioned, are located at 608-610 Commercial Street. This is the site of the old U.S. Mint and Subtreasury and as such is designatedas a State Historic Landmark (#87) and as a San Francisco City landmark (#34). Impacts on historic resources must be evaluated.

During construction ambient noise and vibration levels, would increase. City regulations define limits for construction noise. Construction impacts on traffic circulation, noise and air quality need to be studied.

In the Transportation Element of the San Francisco Comprehensive Plan, Montgomery and Clay are Transit Arterial Streets. Parking on the site is limited to 40 spaces by City Planning Code. Potential impacts, especially cummulative impacts, on parking and traffic need to be evaluated.

The exposure of sensitive receptors and cummulative air quality impacts due to continual office growth in the vicinity must be considered.

The scale of buildings in the project area varies from 1-story to 52. Along Montgomery and Sansome Streets highrise structures are common while side streets are primarily of a lower scale. Public views are blocked by existing highrises in the immedicate vicinity. Long range views of the City skyline from Nob and Telegraph Hills may be affected. The visual character of Commercial Street might be impacted since this street is primarily comprised of older one to four story buildings of heterogeneous character. Potential visual, shading and wind impacts need to be evaluated. A wind tunnel study may be necessary to assess wind effects of the proposed new high-rise.

City services may be affected. The burden on existing public services including fire and police protection my increase. Energy useage of the building would have to be in compliance with Title 24 of the California Administrative Code (Regulations Establishing Energy Conservation Standards for New Residential and Non-Residential Buildings). Effects, especially cummulative effects, on city services must be evaluated.

Housing would be affected by the proposal. The potential loss of residential hotel units and its effect upon the existing shortage of same is one important issue. Another would be increased housing demand in San Francisco possibly caused by increased employment opportunities employment in the downtown area. Both short term and cummulative effects on housing need to be evaluated.

The project is located in an area of potential liquefaction and strong potential groundshaking. The San Francisco Building Code includes a section on seismic safety that is implemented and which helps mitigate the hazard of potential groundshaking. Given the magnitude of the project, potential seisimic hazards should be evaluated.

Two environmental concerns need not be evaluated further. Since no biota except for urban species can be found on this site, endangered species would not be affected. Operational noise would be reguated by the San Francisco Noise Ordinance, Section 2909, "Fixed Source Noise Levels" (San Francisco Municipal Code, Part II, Chapter VIII, Section 1, Article 29, 1972). During the day, noise would be masked by traffic. The project would not be close enough to be audible to residential uses if city ordinance parameters were met.

Therefore, it has been determined that an Environmental Impact Report will be required.

ENVIRONMENTAL EVALUATION

(To be completed by the Department of City Planning)

Decision which triggers filing of Notice of Determination: Discretionary Review

Project Evaluation	YES	MAYBE	NO
1. Would the project be in conflict with the environmental plans and goals that have been adopted by the community where the project is to be located? Indicate names of persons consulted.			X
2. Would the proposal involve possible interference with an emergency response plan or an emergency evacuation plan?			X
3. Would the project be in conflict with applicable zoning regulations?			X
4. Would the use be similar to surrounding uses?	X		
5. Could the project disrupt or divide the physical arrangement of an established community?			X
6. Could the project induce substantial growth or concentration of population or displace a large number of people? Residents have already been displaced.	X		
7. Could the project create a public health hazard or potential public health hazard?			X
8. Would the proposal involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, other chemicals or radiation) in the event of an accident or upset conditions?			X
9. Could the project have a substantial and demonstrable negative aesthetic effect, or obstruct public views? Would cause the demolition of a landmark.	X		
10. Would the project be 3 or more stories taller than surrounding buildings? Would be taller than the 3-4 story structures on Clay and Commercial, but similar to other highrises on Montgomery.	X		
11. Could the project use fuel, water or energy in a wasteful manner or encourage activities which result in the use of large amounts of fuel, water or energy? Could induce travel on a regional scale.	X		
12. Could the project violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations?			X
13. Could the project cause an increase in traffic which would be substantial in relation to the existing traffic load and capacity of the street system? (Must be greater than 10% for a yes.) May or may not. Cumulative impacts must be assessed		X	
14. Could the project cause a substantial increase in parking demand? (Must be greater than 10% for a yes.) May or may not. Cummulative impacts must be assessed.		X	
15. Could the project cause a substantial increase in public transit use? May or may not. Cummulative impacts must be assessed.		X	
16. Could the project result in a substantial detrimental effect on water quality?			X
17. Could the project cause substantial flooding, erosion or siltation?			X
18. Could the project involve the possiblity of contaminating a public water supply system, adversely affecting ground water, or substantially interfering with ground water recharge?			X
19. Could the project result in a substantial detrimental effect on ambient noise levels for adjoining areas? During construction.	X		

		YES	MAYBE	NO
20.	Could the project expose people or structures to major geologic hazards? Is a soil report required by the Environmental Protection Element of the Master Plan? **Is located in an area of potential liquefaction.**			X
21.	Will the proposal result in adverse physical or aesthetic effects to a historic building or structure? **Would cause the demolition of a landmark.**	X		
22.	Will the proposal result in the alteration or the destruction of a prehistoric or historic archeological site?			X
23.	Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?			X
24.	Will the proposal restrict existing religious or sacred uses within the potential impact area?			X
25.	Could the project result in a substantial increase in energy use?	X		
26.	Does the project breach any published national, state or local standards relating to solid waste or litter control?			X
27.	Does the project violate the criteria of the Environmental Protection Element of the Master Plan?			X
28.	Does the project conflict with other applicable Master Plan elements?			X
29.	Is any controversy over environmental issues associated with the project? **Historic and residential losses.**	X		
30.	Are there other factors or significant secondary consequences (specify)? **Loss of residential hotel uses.**	X		

Mitigation Measures. List and discuss all mitigation measures included in the project. Indicate other available mitigation measures. Specify whether each measure is included as part of the proposed project. Use back or attach additional pages if necessary.

NONE

Alternatives. List alternatives which were considered and the reasons for not implementing them.

Mandatory Findings of Significance	YES	NO
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	X	
2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		X
3. Does the project have possible environmental effects which are individually limited, but cumulatively considerable? (Analyze in the light of past projects, other current projects, and possible future projects.)	X	
4. Does the project have possible environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X
5. Is there serious public controversy concerning the possible environmental effect of the project?	X	

DETERMINATION (To be completed by the Department of City Planning)

On the basis of this initial evaluation:

_____ I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Department of City Planning.

_____ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because the mitigation measures, numbers ______, described on page 6 have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.

✓ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Robert Passmore
Assistant Director-Implementation

Date 12/1/80

for Rai Okamoto
Director of Planning

APPENDIX A: WIND STUDY

Prepared for

Environmental Science Associates, Inc.
1390 Market Street
San Francisco, CA 94102

PROJECT: BANK OF CANTON

INITIAL WIND-TUNNEL STUDY

Prepared by

Dr. B.R. White*
3207 Shelter Cove
Davis, CA 95616
(916) 758-1496

I. MODEL AND WIND-TUNNEL FACILITIES

Model

A 1/50 scaled model of the downtown San Francisco area surrounding the proposed building site for several blocks in all directions was provided by ESA, Inc. The model was capable of having three configurations (the existing, proposed and alternate settings) each available for separate wind-tunnel testing.

Wind-Tunnel Facilities

An environmental wind tunnel was built for testing natural atmospheric boundary layer flows past surface objects such as buildings and other structures. The tunnel has an overall length of 22 m (72 ft), a test section of 1.22 m (4 ft) wide by 1.83 m (6 ft) high and has an adjustable false ceiling. Details of the wind-tunnel facility are shown in Figures 1, 2 and 3. Wind speeds within the tunnel can be varied from 1 to 4 m/s (4.8 to 19.3 mph).

The atmospheric boundary layer flow over the downtown area was simulated by an upwind network of turbulence generators. The wind tunnel's false ceiling was adjusted to provide a zero-pressure-gradient downstream flow. The adjustment of the flow to zero-pressure-gradient flow is known to properly model atmospheric boundary layers near the surface of the earth. The long flow development length allows a naturally turbulent boundary layer to develop and properly models the full-scale flow.

---

*Dr. White is Associate Professor of Mechanical Engineering at the University of California, Davis. This study is independent of the university.

2. TESTING PROCEDURE

The wind study was divided into two parts: flow visualization and wind-speed measurements. The flow visualization observations were performed by injecting a continuous stream of smoke at various near surface locations. The subsequent motion of the smoke was recorded and prevailing wind directions determined. Wind-speed measurements were made at twenty-one strategic surface locations using a hot-wire anemometer, an instrument that directly relates rates of heat transfer by electronic signals. The hot-wire signals are proportional to the magnitude and steadiness of the wind. Both the mean wind speeds and corresponding turbulence intensities (presented as rms values) were measured. Thus, high wind speeds and intense gustiness could be detected. Hot-wire measurements made close to the surface have an inherent uncertainty of ± five percent of the true values.

Calibration measurements were made before and after each series of hot-wire experiments. The calibration was accomplished by means of a Thermo-System Incorporated (TSI) Model #1126 hot-wire anemometer calibrator especially designed for low-wind speeds. The calibration is accurate to ± one percent (see enclosed calibration curve). The flow above the model was adjusted to nearly the same wind speed of 3.70 m/s (12.2 ft/sec or 8.28 mph) for all experiments. The ratio of near surface speed to freestream wind speed was calculated from the hot-wire measurements and is presented on the attached figures.

Experiments were performed for three prevailing wind directions (west, northwest and southwest) for the existing, proposed and alternate settings. All hot-wire measurements were taken at the same series of surface points around the building site for all three wind directions and the three building settings.

3. TEST RESULTS AND DISCUSSION

The measured wind speeds are expressed as normalized percentage of the freestream wind tunnel speed where 1.0 represents a wind speed equal to 100 percent of the freestream value. The numerical ratios displayed on the figures can be approximately interpreted by using the following scale presented in Table 1. The assessment of wind impact on the surrounding settings is preliminary and should be construed only as an estimate to the projected actual wind environment. The scale presented on Table 1 is subjective.

Intensity of Wind Speed	Percentage of Freestream Speed
Low	0.00 - 0.19
Moderately low	0.20 - 0.29
Moderate	0.30 - 0.49
Moderately high	0.50 - 0.69
High	0.70 - 1.00
Very high	over 1.00

Table 1. Relative Intensity of Surface Winds

It should be noted that the plotted values are not actual wind speeds but ratios. Thus, a point having "very high" wind speed could still experience light winds on a near-calm day. Likewise, a point found to have "low" wind speed could experience significant winds on an extremely windy day.

Northwest Wind

(i) Existing setting. The near surface wind speeds at the Existing Setting (abbreviated as ES) are generally found to be low or moderately low, varying in the measured speed ratios from 0.11 to 0.27 with the exception of a steady moderate wind speed ratio of 0.47 occurring on the Montgomery and Washington Streets and the moderate wind speed ratio of 0.38 occurring on Sacramento Street east of Montgomery Street. There are gusty winds occurring at the intersections of Clay-Montgomery Streets and Commercial-Montgomery Streets, although the magnitude of the wind is moderately low. Wind along Clay Street, directly north of the existing site, is accelerated to a speed ratio of 0.27 from 0.17 over a one-half block distance. Strong vertical vortices are shed off of both north and south downwind edges of the Transamerica Pyramid. There is a steady strong wind along Columbus Avenue which splits on the northwest edge of the Transamerica Pyramid with the majority of wind turning on to Washington Street.

(ii) Impact of project. The presence of the Proposed Setting (abbreviated as PS) would create several changes in the wind environment near the site in the following manner. Minor changes: (a) Slightly reduced wind flow along Kearny Street; (b) A 19 percent wind speed reduction occurring at the intersection of Washington-Montgomery Streets; (c) An increased gustiness at the intersection of Washington-Kearny Streets although still remaining low in magnitude; (d) A slight increase in wind flow along Clay Street east of Montgomery Street. Major adverse changes: (a) A substantial increase (130 percent) on Commercial Street south of the proposed site with minor flow reversal (upwind flow) occurring on Commercial while the intersection at Commercial-Montgomery Streets remains essentially the same; (b) A wind flow increase of 44 percent on Clay Street with rapid acceleration occuring north of the proposed site; (c) An effective doubling of the wind speed at the intersection of the Clay-Montgomery Streets due to the presence of vertical vortex shedding off of the northeast corner of the proposed building.

The Alternate Setting (abbreviated as AS) would have basically the same wind environment as the PS except there would be an approximate seven percent increase in wind speed at the Clay-Montgomery Streets intersection when compared with the PS case.

West Wind

(i) Existing setting. The near surface wind speeds at the ES are generally found to be low or moderately low, with the exception of steady moderate wind along Sacramento Street and moderately strong accelerating steady wind along Clay Street just north of the existing site which is caused by a vertical vortex that is formed off of the large building located on the northwest corner of the intersection of Clay and Montgomery Streets. The vortex extends down to the street level and, additionally, causes gusty flow at that intersection although the magnitude of the wind is moderately low. Reversing and gusty winds with low magnitudes are present on Merchant Street near Montgomery Street. The intersections of Kearny and Montgomery Streets with Sacramento Street have unsteady gusty winds with moderately low magnitudes. Also, the Washington-Montgomery and Merchant-Montgomery Streets intersections are unsteady and gusty with moderately low magnitudes. There is mild reversing flow on Commercial Street south of the existing site. Strong vertical vortices are shed off of both the north and south downwind edges of the Transamerica Pyramid.

(ii) Impact of project. The presence of the PS would create several changes in the wind environment surrounding the site. The minor changes are: (a) The mean wind speed along Sacramento Street is reduced by approximately ten percent; (b) Gustiness is increased by 20 percent at the southwest corner of the Transamerica Pyramid; (c) The aforementioned reversing flow on Commercial Street near

Montgomery Street vanishes entirely; and (d) There is a 35 percent increase in wind speed along Clay Street east of Montgomery Street although the resultant wind speed is still classified moderately low. Three major adverse changes were observed: (a) The wind speed doubles on Commercial Street south of the proposed site increasing the wind speed from moderately low to moderate; (b) There is a 35 percent wind speed increase (from moderately low to moderate) on Clay Street north of the proposed site and the wind environment is substantially worsened by the rapid acceleration of wind speed from Kearny Street (speed ratio 0.10) to Clay Street (speed ratio 0.45); and (c) There is effectively a 50 percent increase in wind at the Clay-Montgomery Street intersection.

The AS would exhibit the same wind environment as the PS.

Southwest Wind

(i) Existing setting. The ES for the southwest wind direction is located directly downwind of the Bank of America building and consequently the entire surroundings of the ES (and PS and AS) for several blocks in all directions lie in the rather large wake of the Bank of America building. This type of large scale wake flow has elevated levels of turbulence intensities and can create seemingly unusual wind environments. The near surface wind speeds at the ES are found to be low in magnitude except for winds on Merchant Street and Washington Street which are still moderately low in magnitudes. Wind direction on Sacramento and Clay Streets between Kearny and Montgomery Streets is from east to west and unsteady while low in magnitude. There are low oscillating winds on Commercial Street. There are no apparent vertical vortices shed off of the Transamerica Pyramid. Unsteady and gusty intersections at Clay-Montgomery, Sacramento-Montgomery and Kearny-Sacramento Streets all are low in magnitude. Note, the wind direction, a few stories up in elevation, is all from the southwest and not the same as many of the street winds described above.

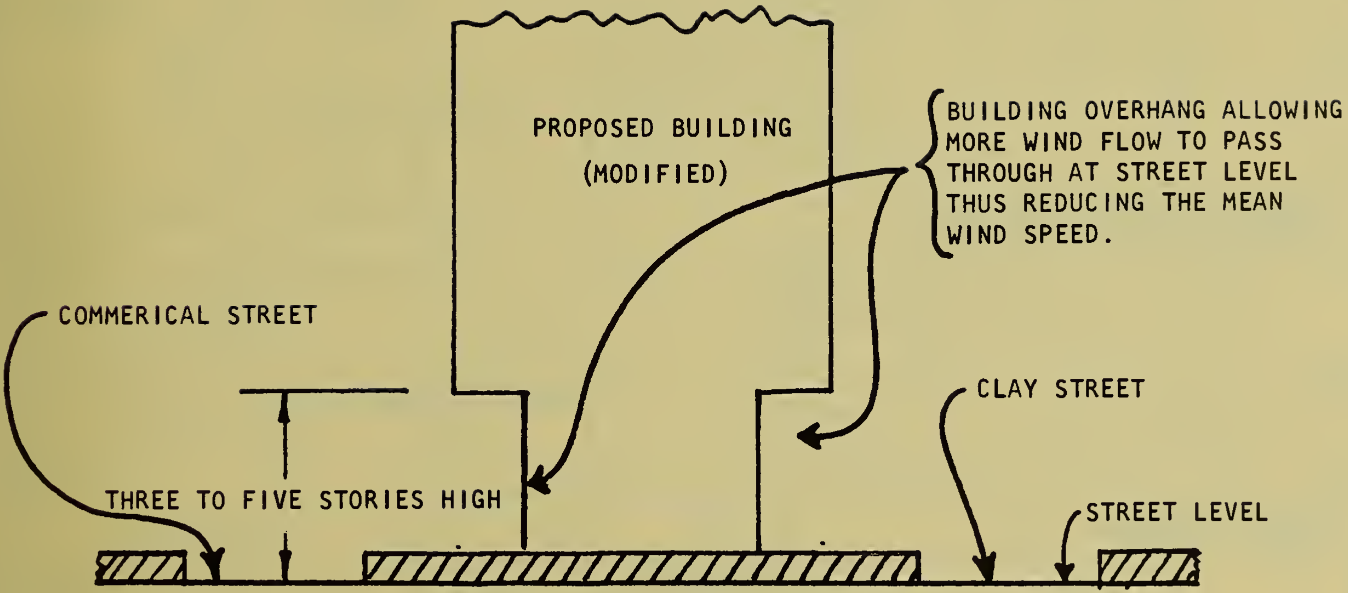
(ii) Impact of project. The presence of the PS and AS would create several changes in the wind environment, all minor in extent. They are: (a) An 18 percent decrease in wind speed at the Montgomery-Washington Streets; (b) A slight increase along Montgomery Street between Sacramento and Clay Streets; (c) A decrease in gustiness at the intersection of Clay-Montgomery and Kearny-Sacramento Streets; (d) Increased gustiness at the Merchant-Kearny Streets intersection; and lastly (e) The east to west wind on Sacramento and Clay Streets between Kearny and Montgomery Streets disappears or diminishes.

The AS and PS have essentially the same wind environment and when compared to the ES there are no dramatic increases in either gustiness or wind speed.

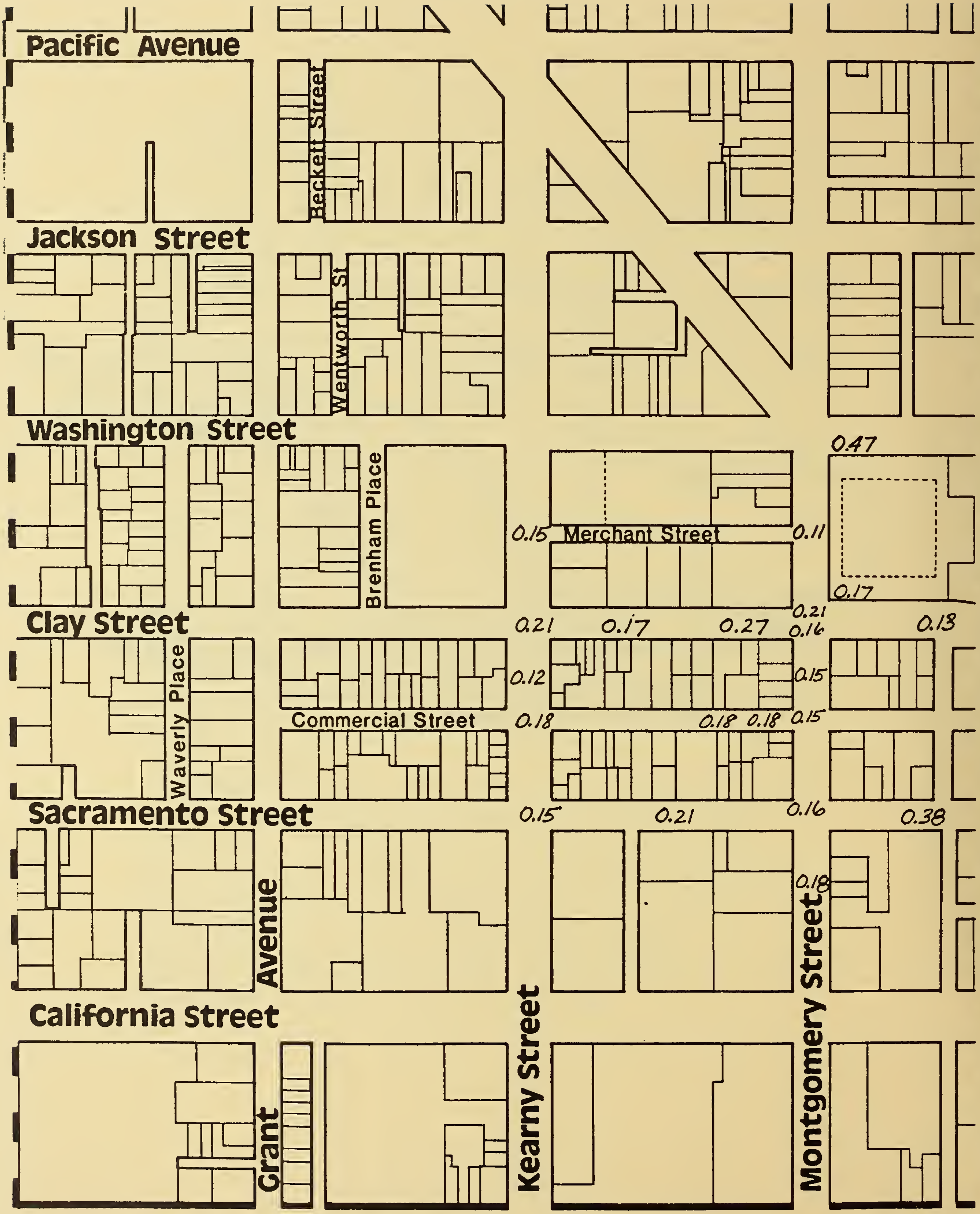
4. MITIGATION MEASURES

The most undesirable changes in wind environment due to the presence of the proposed building would occur on Clay Street directly north of the proposed building, on Commercial Street directly south of the proposed building, and at the Clay-Montgomery Streets intersection. These adverse wind conditions resulting from the building presence would occur for both west and northwest winds. For the northwest wind, the Clay and Commercial Streets wind speeds increase by 44 percent and 139 percent respectively; while, for the west wind the increases are 34 percent and 96 percent respectively for the proposed site. While the resultant winds in all cases are classified moderate, there still is a substantial increase over the existing winds. At the Clay-Montgomery intersection there is an effective doubling of the existing wind speeds to moderate values for both the west and northwest cases. Mitigating measures that should substantially reduce the moderate wind speeds would be construction of small structures that could function as windbreaks on Clay and Merchant Streets. They could include, but are not limited to, mature street trees, kiosks for newspapers, flower vendors, telephone booths or low (10-15 feet high) street side planters along side the proposed building on Clay and Commercial Streets.

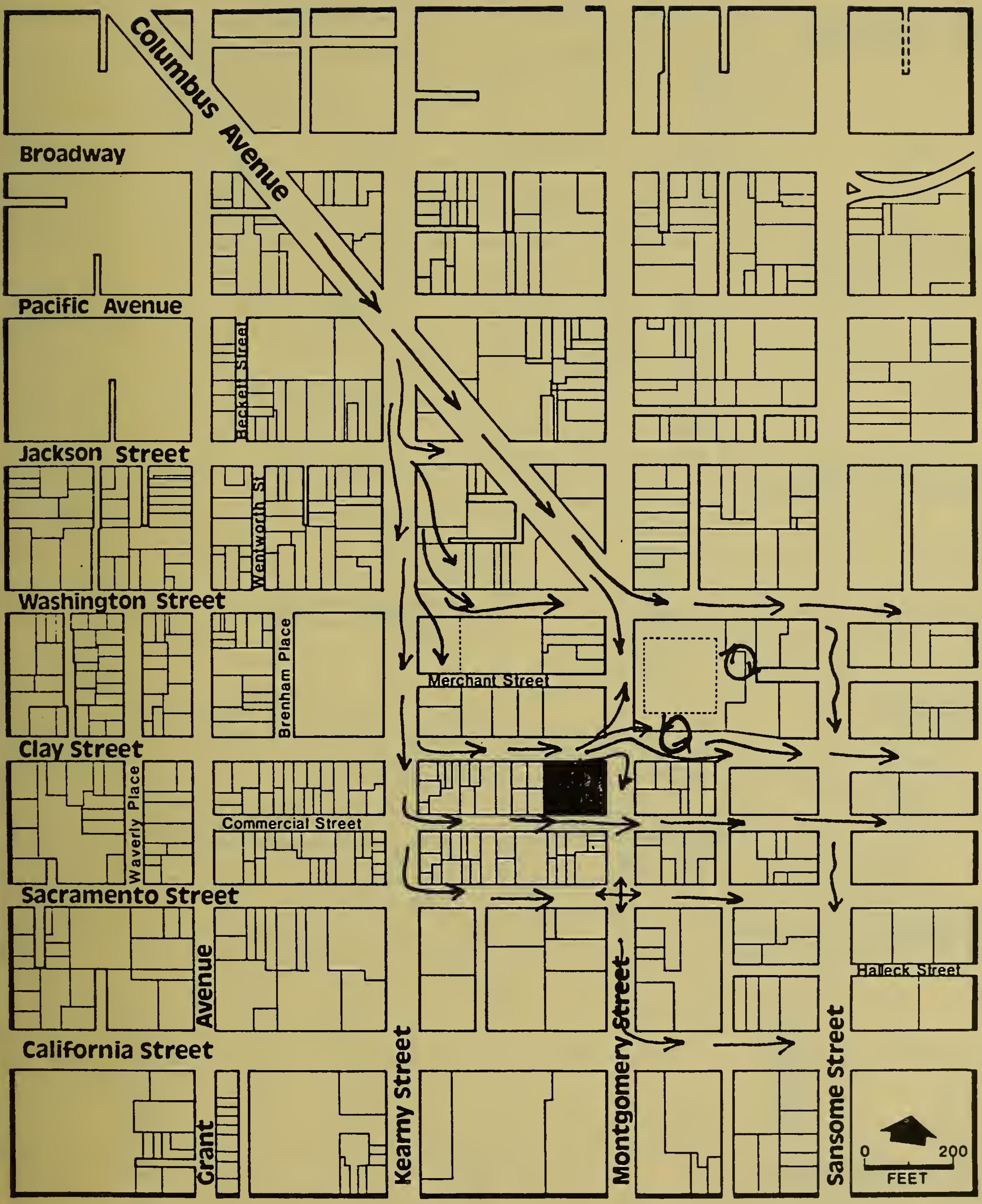
An alternative method that could negate the adverse effects of the presence of the proposed building would be a change in the building design. If the surface area square footage of the first few floors (perhaps five stories or so) is reduced along both Clay and Commercial Street this would allow more area for the wind to pass through and hence should reduce the mean wind speeds. This change could be accomplished by having building overhangs on Clay and Montgomery Streets as shown on the next page.


PROPOSED BUILDING
(MODIFIED)
BUILDING OVERHANG ALLOWING MORE WIND FLOW TO PASS THROUGH AT STREET LEVEL THUS REDUCING THE MEAN WIND SPEED.
COMMERICAL STREET
THREE TO FIVE STORIES HIGH
CLAY STREET
STREET LEVEL

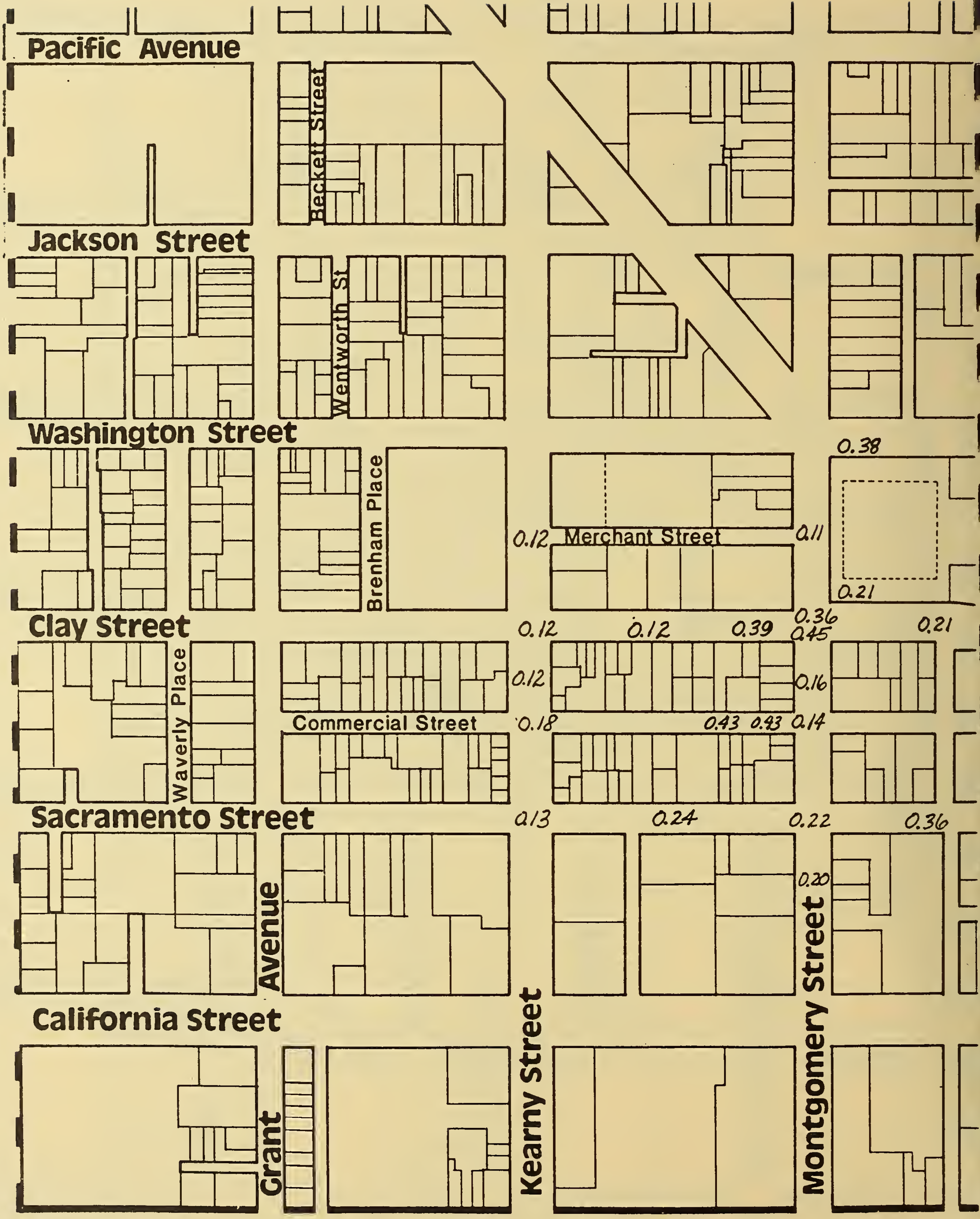
SIDE ELEVATION OF THE (MODIFIED) PROPOSED BUILDING
LOOKING WEST FROM MONTGOMERY STREET



Legend WIND SPEED RATIOS FOR NORTHWEST WIND - EXISTING SETTINE



Legend WIND DIRECTIONS FOR NORTHWEST WINDS - EXISTING SETTING



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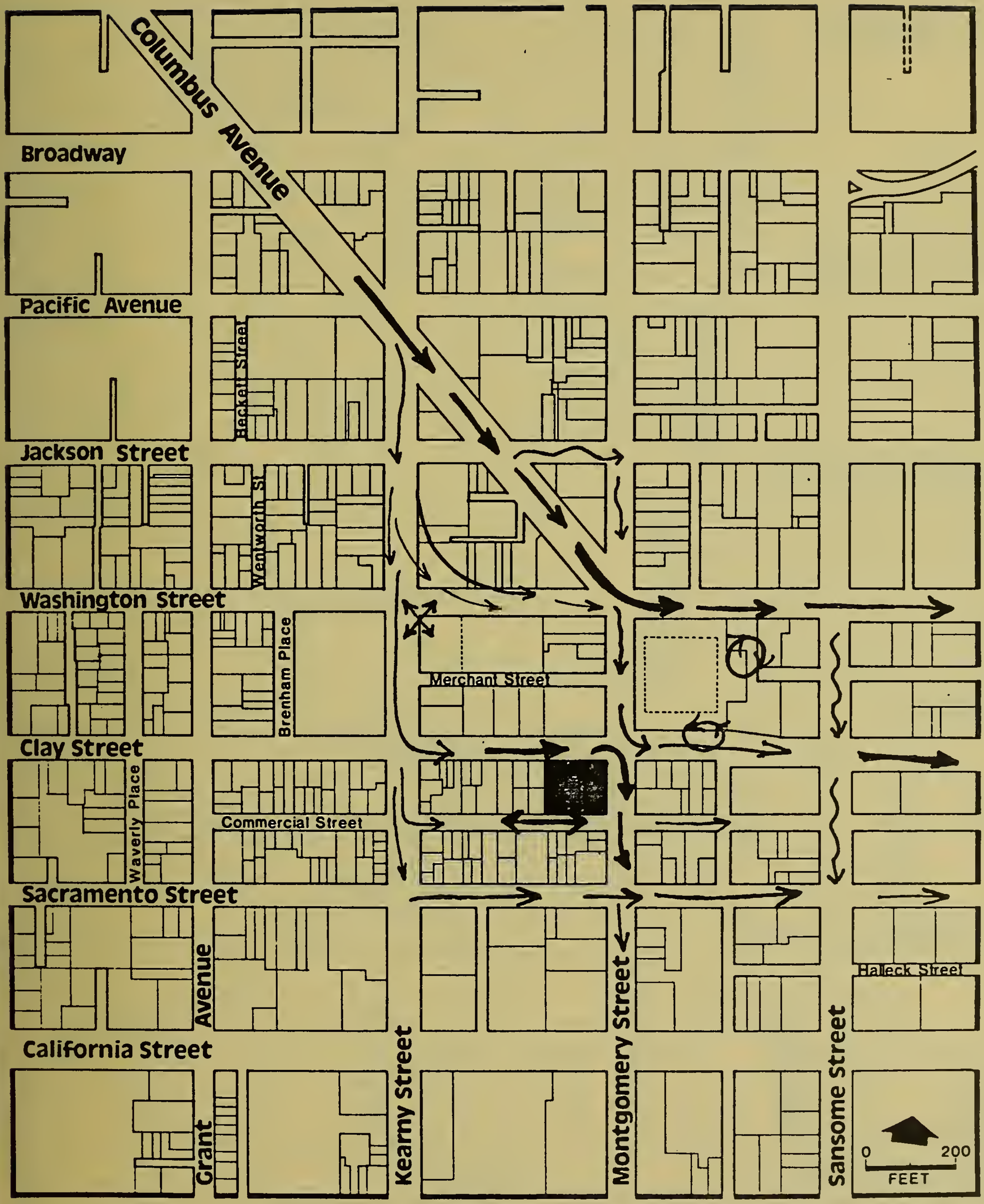

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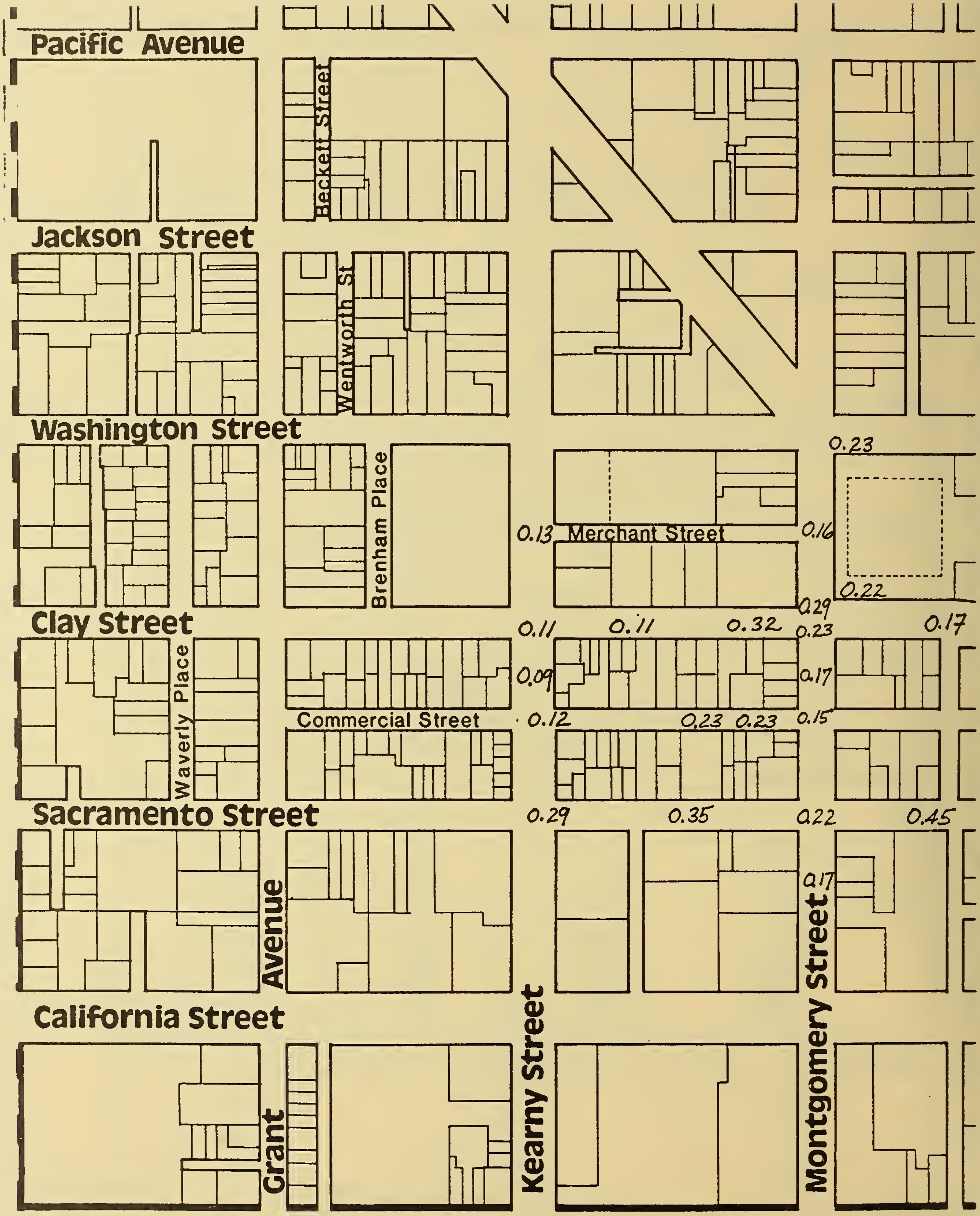

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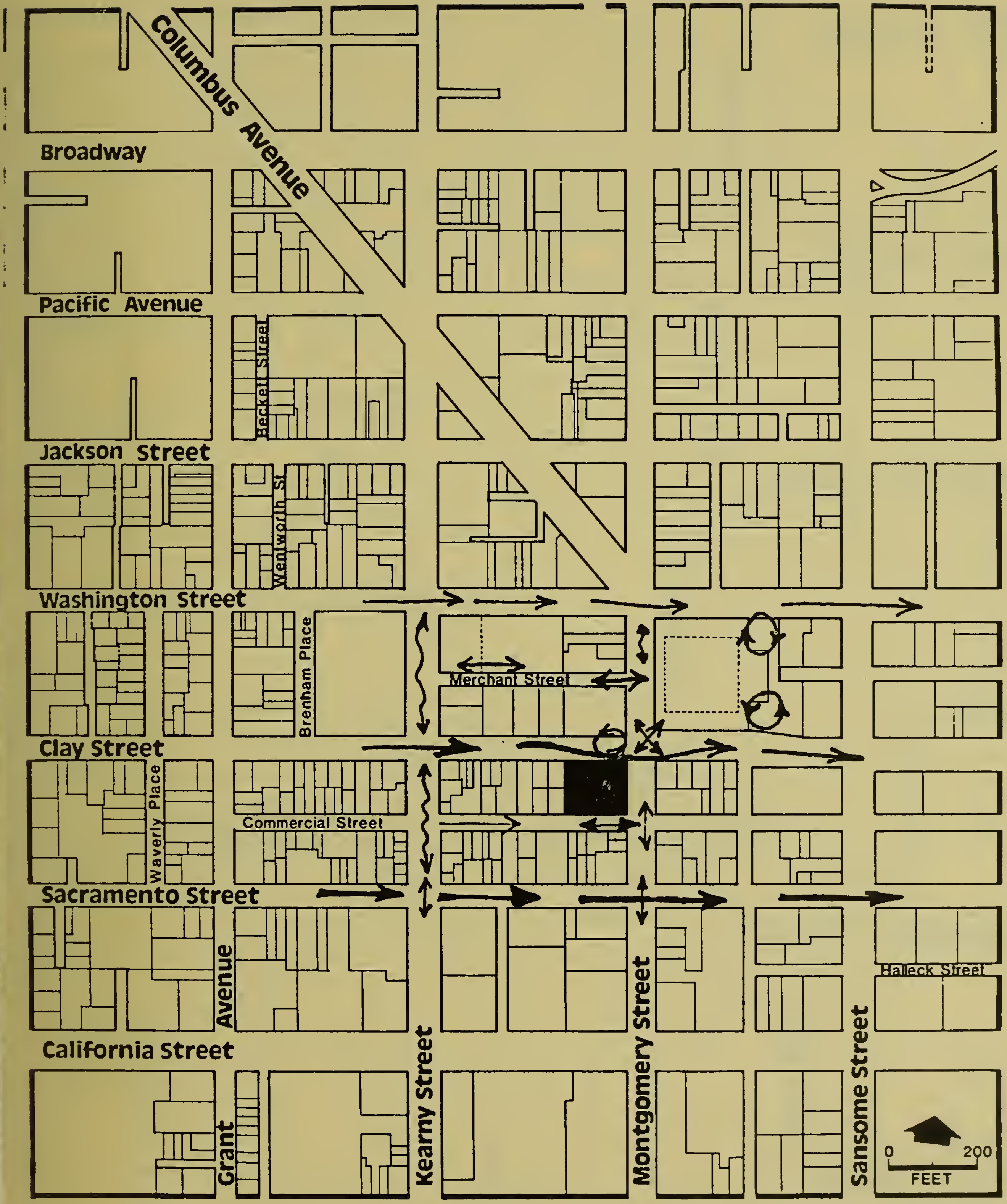

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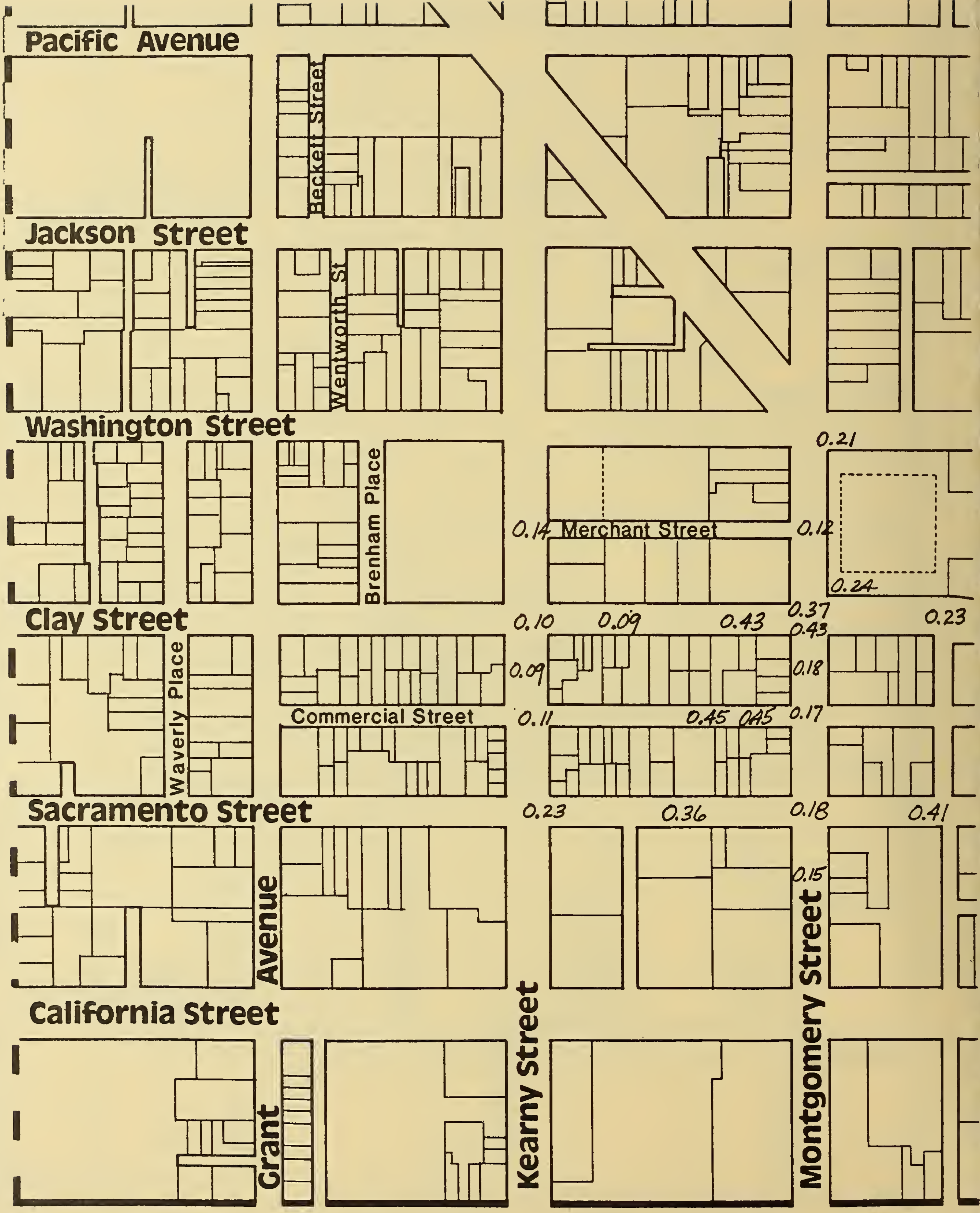
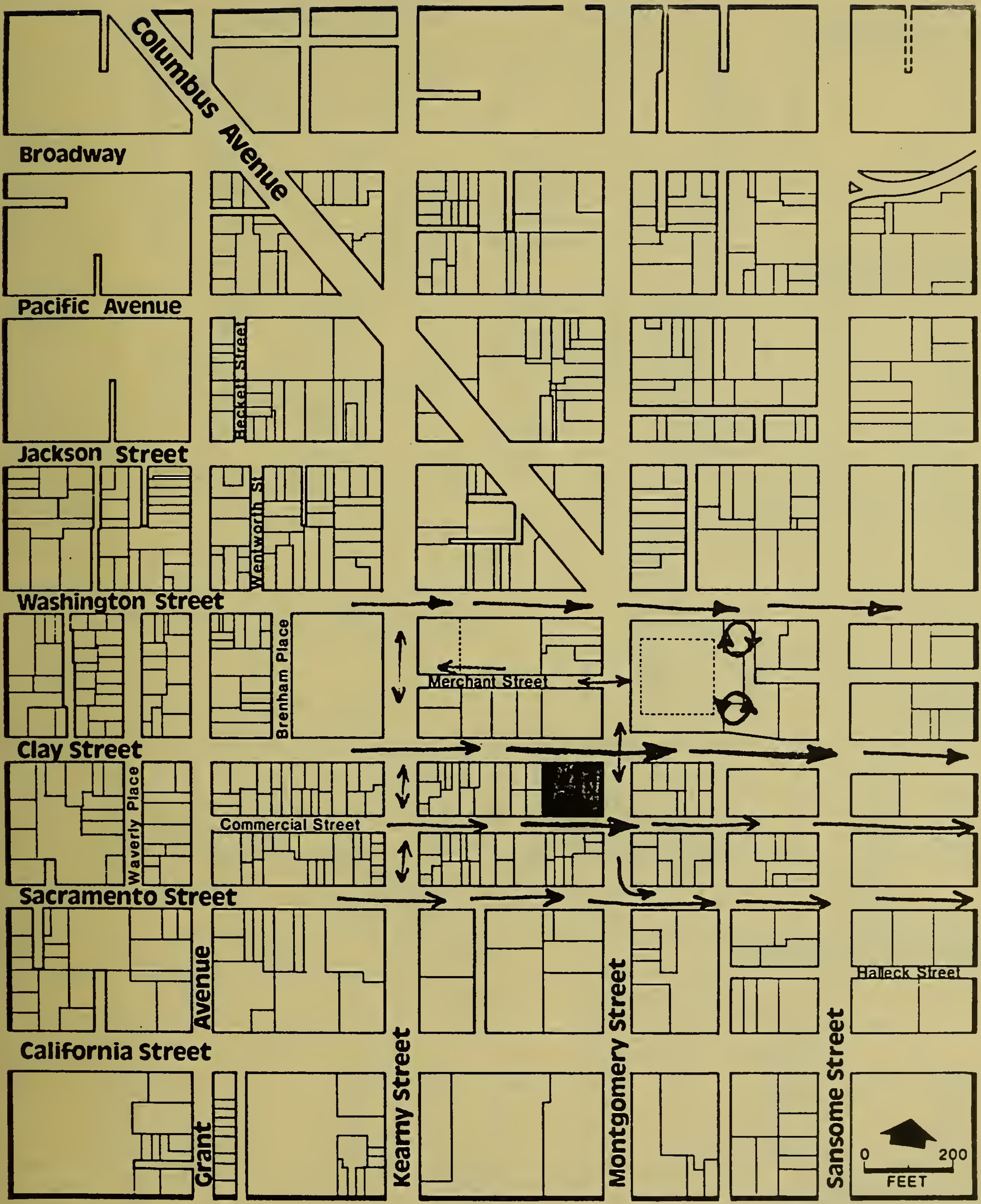
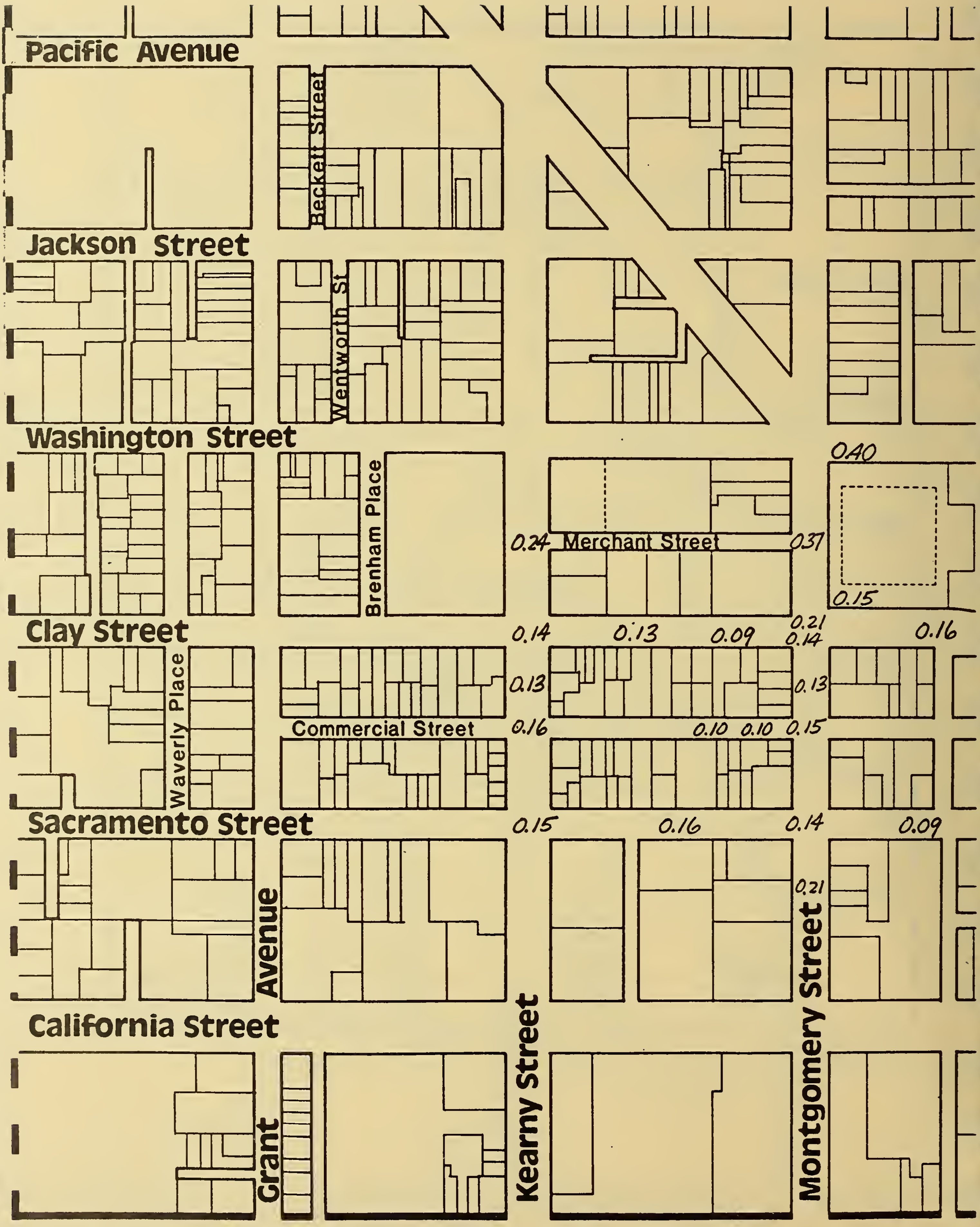


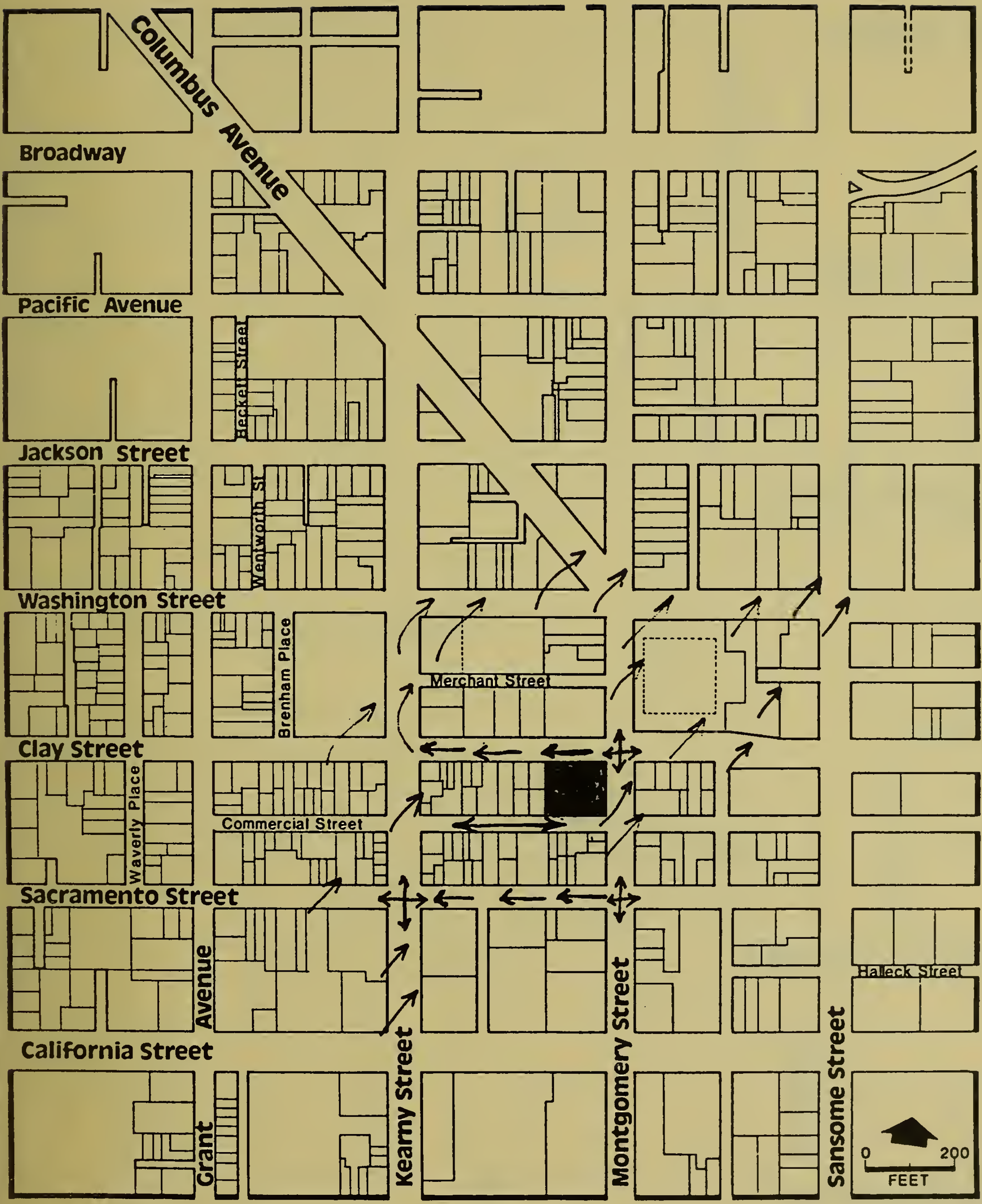
Legend WIND SPEED RATIOS FOR WEST WIND – PROPOSED SETTING



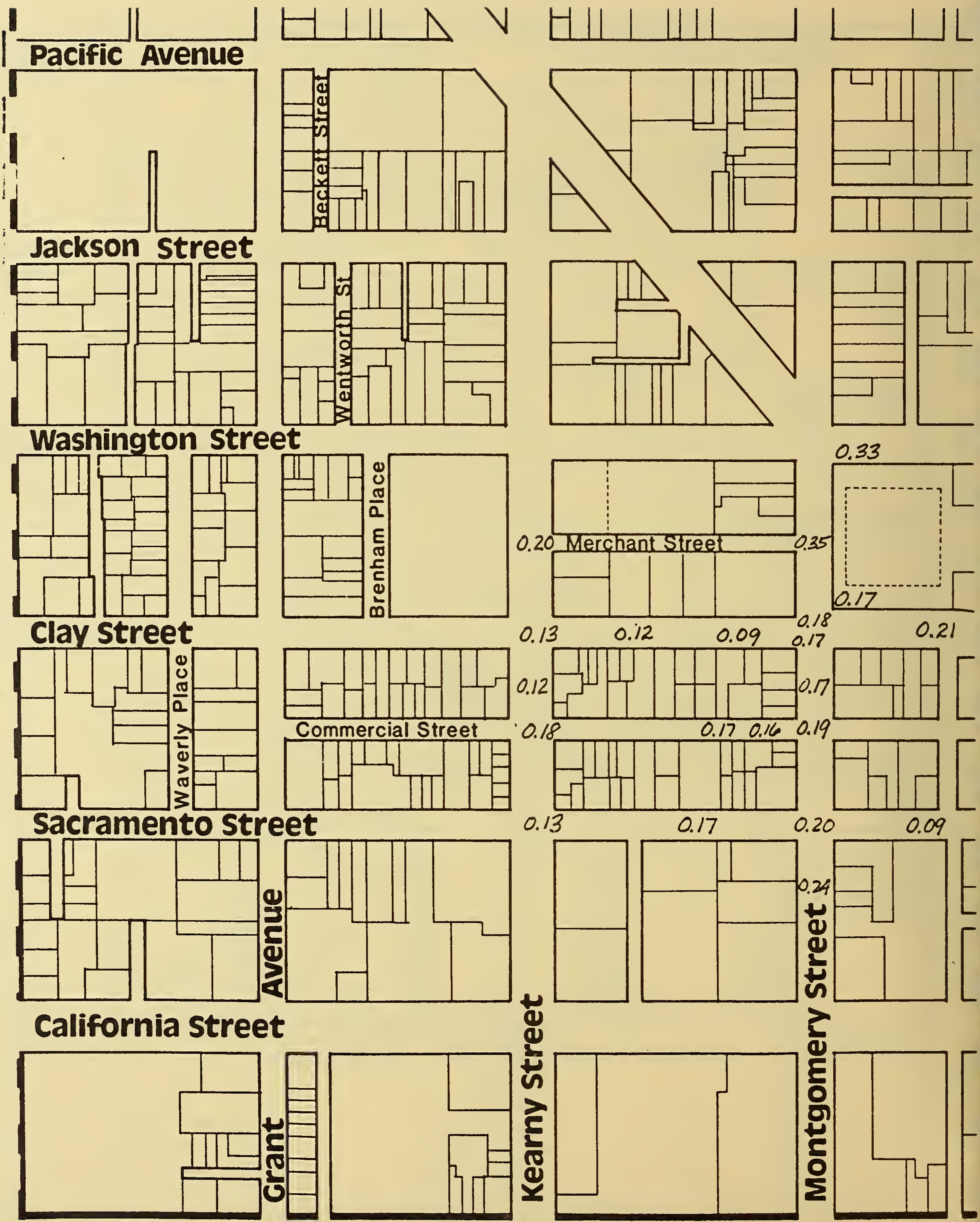
Legend WIND DIRECTIONS FOR WEST WINDS - PROPOSED SETTING AND ALTERNATE SETTING.



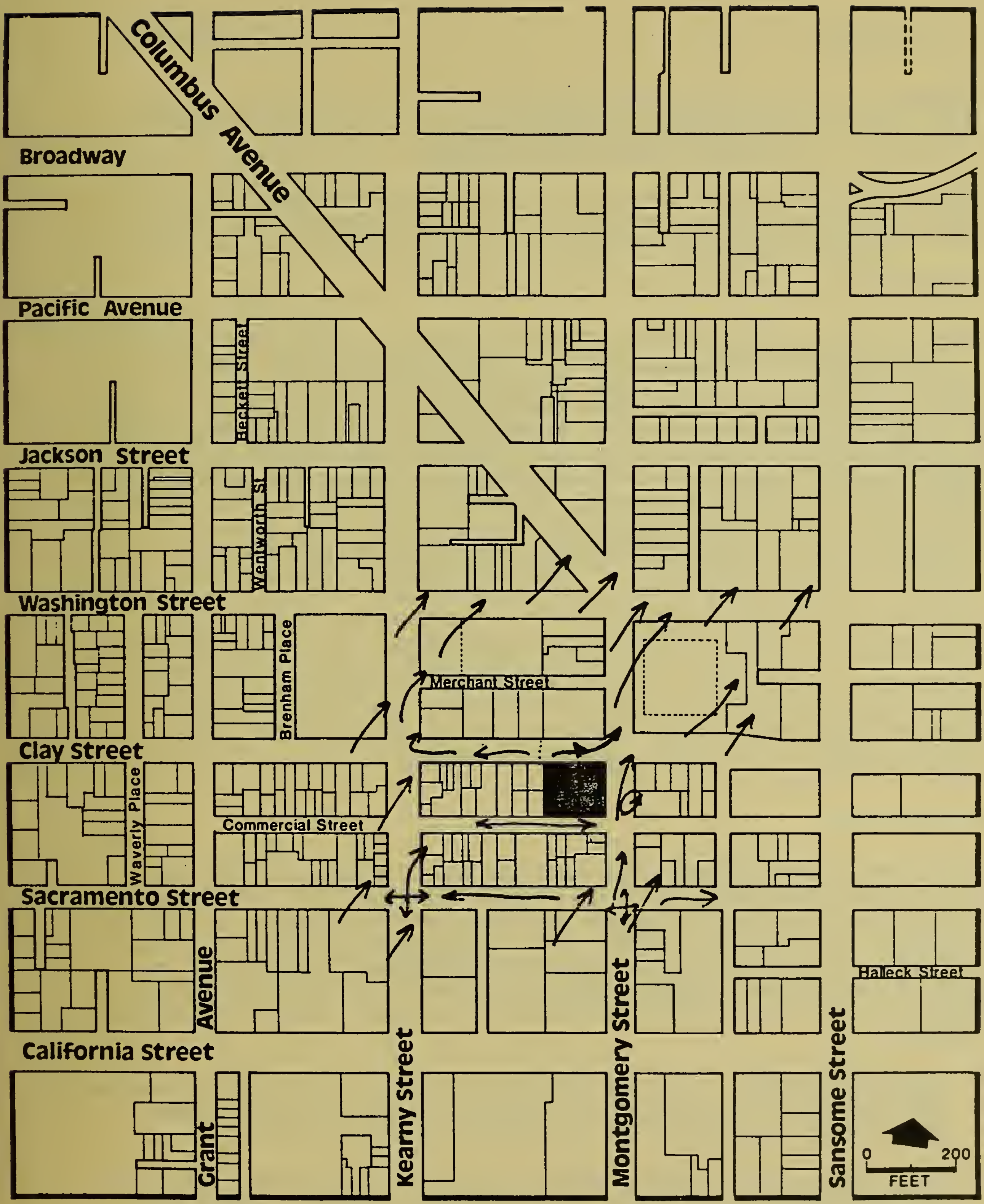
Legend WIND SPEED RATIOS FOR SOUTHWEST WIND - EXISTING SETTING



Legend WIND DIRECTIONS FOR SOUTHWEST WINDS - EXISTING SETTING.



Legend WIND SPEED RATIOS FOR SOUTHWEST WIND - PROPOSED SETTING



Legend WIND DIRECTIONS FOR SOUTHWEST WINDS - PROPOSED SETTING AND ALTERNATE SETTING.

APPENDIX B: CULTURAL AND HISTORIC ASPECTS

APPENDIX B-1: ARCHITECTURAL EVALUATION SURVEYS

The Architectural ratings discussed in the text of this report (see Section III.C., Cultural Resources; and Figure 20, page 46) represent the results of two separate architectural surveys:

SAN FRANCISCO DEPARTMENT OF CITY PLANNING SURVEY

Between 1974 and 1976, the San Francisco Department of City Planning conducted a citywide inventory of architecturally significant buildings. An advisory review committee of architects and architectural historians assisted in the final determination of ratings for the 10,000 buildings which were entered in an unpublished 60-volume record of the inventory. The rated buildings have been represented on a set of color-coded maps which identify the location and relative significance of each building surveyed. The maps are available for public inspection at the Department of City Planning.

The inventory assessed the architectural significance of the surveyed structures from the standpoint of overall design and particular design features. Both contemporary and older buildings were included, but historical associations were not considered. Each building was numerically rated according to its overall architectural significance. The ratings ranged from a low of "0" to a high of "5". Factors considered included architectural significance, urban design context, and overall environmental significance. The architectural survey resulted in a listing of the best 10% of San Francisco's buildings. In the estimation of the inventory participants, buildings rated "3" or higher represent approximately the best 2% of the City's architecture.

HERITAGE SURVEY

More recently, the Foundation for San Francisco's Architectural Heritage, through its consultants, Charles Hall Page & Associates, Inc., conducted an architectural and historical survey of all downtown structures. In 1979, the inventory results were published in the book Splendid Survivors. Criteria considered in rating the buildings include Architectural Significance and Negative Alternations. Summary ratings from "A" to "D" were then assigned to each building on the basis of these scores. The summary ratings indicate the following:

A. Highest Importance. Individually the most important buildings in downtown San Francisco. All "A" group buildings are eligible for the National Register and have highest priority for City landmark status.

B. Major Importance. Buildings which are of individual importance by virtue of architectural, historical, and environmental criteria. "B" group buildings may be eligible for the National Register. The Landmarks Preservation Advisory Board considers "B" buildings also to have highest priority for City landmark status.

C. Contextual Importance. Buildings which are distinguished by their scale, materials, compositional treatment, cornice and other features. Many "C" group buildings may be eligible for the National Register as part of historical districts.

D. Minor or No Importance. Buildings which are insignificant examples of architecture. Most "D" group buildings are "sites of opportunity."

NOT RATED. Buildings which have been built or suffered insensitive exterior remodelings since 1945.

ARCHITECTURALLY AND/OR HISTORICALLY SIGNIFICANT BUILDINGS IN THE DOWNTOWN

On May 29, 1980, the City Planning Commission by Resolution No. 8600 adopted a list of architecturally and/or historically significant buildings in the Downtown area, based on the above described surveys. The purpose of the list is to advise developers and building owners of the importance the City places upon their conservation and to require special review by the Commission of any plans which would affect any building or buildings on such list. As noted in Section III.C., the Old Sub-Treasury Building on the project site is on this list.

APPENDIX B-2: CASE REPORT ON DESIGNATION OF OLD SUB-TREASURY BUILDING AS CITY LANDMARK NO. 34

LANDMARKS PRESERVATION ADVISORY BOARD
Final Case Report for January 7, 1970

ORIGINAL UNITED STATES
MINT AND SUBTREASURY
608 COMMERCIAL STREET

OWNER: Determined Productions, Inc.

LOCATION: 608 Commercial Street, near Montgomery Street, Lot is 60 feet wide, 59 feet 9 inches deep, being Lot 29 in Assessor's Block 227.

HISTORY: In 1852, this lot was purchased by the United States Government from private assayers Curtis, Ferry, and Ward, who operated the U.S. Assay Office which, while not a government operation, had assayed, melted and minted gold from the mines and thus became an unofficial mint. Due to the gold-mining activity in California, the Government finally determined to open a Branch Mint in San Francisco; for convenience, they chose the operating private mint. However, although it was purchased in 1852 and altered in 1853, the new Branch Mint did not open for business until April 3, 1854.

President Pierce appointed John C. Hewston, Melter and Refiner at the Philadelphia Mint, to establish San Francisco's new Mint. When the Mint opened, Lewis A. Birdsall, M.D. was its first Superintendent. They were assisted by Colonel Agoston Haraszthy who served as Assayer. In 1850, Haraszthy had been elected Sheriff of San Diego County and then City Marshal of San Diego, holding both positions until late 1851 when he was elected State Assemblyman. In the same year, Haraszthy introduced commercial European wine grapes to California, and for this reason, he later became known as "the father of the modern California wine industry". In March 1852, while serving in the Legislature, Haraszthy purchased 210 acres near Mission Dolores; he completed his term and then remained in San Francisco. Here, he planted grapes and became a private assayer and refiner in 1854 as well as being assayer of the new United States Mint.

In 1854, well-known author J. Ross Browne was appointed confidential agent by the Secretary of the Treasury and was dispatched to investigate various irregularities in Federal agencies on the Pacific Coast.

Browne, on arrival in San Francisco, found complaints of inefficiency concerning the Mint. On investigation it developed that the staff was working in cramped quarters and that there was a shortage of materials needed for the minting. This resulted in the Mint not meeting the coinage demand of the City. More serious was the revelation that there was a lack of security and a conflict of interest of the officers. This resulted in the resignation of Hewston in 1855 and Birdsall in 1856. Haraszthy replaced Hewston, but in 1857, he in turn resigned due to criticism and returned to his private melting and refining business. In 1860 and 1861, however, Haraszthy was acquitted of any fraud in both Civil and Criminal suits.

Another famous person connected with the Mint was Bret Harte who served as clerk and later secretary to the Superintendent of the Mint from 1863-1869.

In the early days, the Mint served two purposes: the first was to coin or mint money; the second was to store coined gold and silver as a subtreasuryof the United States while unofficially serving as an early kind of reserve bank. As a subtreasury, the building contained money used by government paymasters and disbursing officers to pay all bills incurred by the government. An example of the Mint's function as an unofficial reserve bank was the 1868 transfer of gold to stem a "run" or panic on Ralston's Bank of California. As related in Asbury Harpending's "Great Diamond Hoax", he, together with bank officials, "borrowned" coined gold from the mint at midnight and placed it in the teller's cages to allay depositors' fears concerning the soundness of the bank. Having served its purpose, the gold was returned to the subtreasury the next night.

By the later 1860's, it was clear that the building could not house both functions, and the inadequacy of the quarters was commented on in the press. In 1867, provisions for a new site at Fifth and Mission were made and after the Mint was moved to the new location in 1874, this building housed the subtreasury and other government offices.

In 1875, the Commercial Street building was demolished and a new one erected on the basement and the old vaults. The replacement building was again occupied by the same government offices. In the late 1870's, however, as the resumption of specie payment, authorized by Congress to take place in 1870, approached, the subtreasury required more space for increased staff and other departments moved out. The treasury then continued at this location until 1915, when it moved to a new building at Sansome and Pine Streets, now the Pacific Coast (San Francisco) Stock Exchange.

The Old Mint and Subtreasury was subsequently (1922) sold to private interests. In 1928, the McCoy Label and Printing Company moved in and remained until 1965. The building has most recently been used by Determined Productions Inc. as a manufacturer's warehouse, although it is now vacant.

The central portion of the facade is slightly recessed from the street line, with somewhat projecting wings on either side. The wing on the westerly side is one bay; that on the east is composed of two bays. This irregularity is accounted for by the statement that after the Earthquake and Fire of 1906, a previous cartway on the side of the building was closed, and the building was extended ten feet to cover the entire width of the lot, thus destroying the previous regularity of the facade.

The wings or side portions of the facade are composed of wide square brick columns, rising from the main floor (above street level), and supporting a heavy architrave, which is continued on the central portion of the facade. Sections of a classical foliate moulding simulating capitals surmount the columns. The bays, closed with multipaned windows, contain wide, sloping and projecting sills, which are continued on all columns as well; window sills are formed of the upper parts of the cast iron lower walls beneath the windows while those of the columns are of stone, inserted in the brick columns.

The central portion of the facade is divided into three bays by two narrow cast iron columns, and the easterly wing is likewise divided in two bays by a similar column. The motifs of the facade, foliate moulding and projecting sills, are continued on these cast iron columns as they are on the brick ones.

The architrave is surmounted by a double cornice, in turn surmounted by a brick parapet wall at one time covered with cement or mastic which is now peeling off. Wide horizontal openings in the parapet wall are closed with short round vertical iron bars.

The main floor is raised above sidewalk and grade level, and is reached by a short flight of steps to a doorway in the middle bay of the central facade.

Under the thick main floor, the basement foundation walls are visible from the street; embedded in the main floor are a row of iron spikes along the street front, facing the sidewalk.

ZONING: C-3-0, the downtown central business office district. Nearby land uses include the Bank of Canton to the east, shops and small manufacturing to south and west, and offices to the south and east across Montgomery Street.

RECOGNITION: A plaque, affixed in 1949 by the California Centennial Commission in cooperation with the Society of California Pioneers, proclaims this State Registered Historical Landmark Number 87 and recognizes the site as that of the First United States Branch Mint.

APPENDIX C: EMPLOYMENT AND HOUSING FACTORS

TABLE C-1: MAJOR OFFICE BUILDING CONSTRUCTION IN SAN FRANCISCO AS OF NOVEMBER 1981*

Year	Total Gross Sq. Ft. Completed	5-Year Total	5-Year Annual Average	Cumulative Total	All Office Buildings
Pre-1960				28,145,000*	24,175,000**
1960	1,183,000				
1961	270,000				
1962	--				
1963	--				
1964	1,413,000				
		2,866,000	573,200		
1960-1964		(2,580,000)	(516,000)	30,725,000	26,754,000***
1965	1,463,000				
1966	973,000				
1967	1,453,000				
1968	1,234,000				
1969	3,256,000				
		8,379,000	1,675,800		
1965-1969		(7,541,000)	(1,508,000)	38,266,000	34,295,000
1970	1,853,000				
1971	--				
1972	1,961,000				
1973	2,736,000				
1974	2,065,000				
		8,615,000	1,723,000		
1970-1974		(7,753,000)	(1,550,000)	46,019,000	(42,048,000)
1975	536,000				
1976	2,429,000				
1977	2,660,000				
1978	--				
1979	2,532,000				
		8,157,000	1,631,000		
1978-1979		(7,341,000)	(1,468,000)	53,360,000	49,389,000
1980	1,284,000				
1981	3,138,000			57,340,000	53,369,000
Under Construction					
82/84	5,600,000	10,022,000	2,004,000		
1980-1984		(9,020,000)	(1,804,000)	62,380,000	58,409,000
Approved Projects	3,113,000			65,182,000	61,211,000

* S.F. Downtown Zoning Study - Working Paper No. 1, January 1966, Appendix, Table 1, Part 1. For pre 1965, includes the area bounded by Vallejo, Franklin, Central Skyway, Bryant and The Embarcadero. Also includes 1/3 of mixed use retail/office. For post 1964, includes the entire city.

** Gross Floor Space for downtown offices are included for the following functional areas: Financial, Retail, Hotel, Jackson Square, Golden Gateway, Civic Center, South of Market, and Outer Market Street as defined in the January 1966 report. For post 1964, the entire area east of Franklin is included.

*** Net equals 90% of gross. Net new space is added at an increase factor of 90%, since it is assumed that space equal to 10% of a new building is demolished to make land available for the new replacement building.

SOURCE: Department of City Planning

TABLE C-1a: MAJOR OFFICE BUILDINGS UNDER CONSTRUCTION AS OF MAY, 1981

Assessor's Block	Project Name	Office (Gross Sq. Ft.)
164	936 Montgomery	25,000
167	Golden Gateway III	100,000
168	Golden Gateway II	100,000
237	353 Sacramento	287,000
263	101 California	1,300,000
288	101 Montgomery	278,000
292	Crocker National Bank	770,000
312	50 Grant (Ransohoff's)	90,000
762	Opera Plaza	50,000
3708	25 Jessie	111,000
3709	Five Fremont Center	843,000
3712	Federal Reserve Bank	653,000
3718	Pacific Gateway	548,000
3735	Gift Mart	340,000
4991	S.F. Executive Park II	105,000
TOTAL		5,600,000

SOURCE: Department of City Planning

TABLE C-1b: MAJOR OFFICE BUILDINGS APPROVED AS OF NOVEMBER, 1981

Assessor's Block	Project Name	Office (Gross Sq. Ft.)
161	Mirawa Center/Grant and Pacific	84,000
163	901 Montgomery	82,000
166	222 Front	141,000
166	750 Battery	105,000
239	456 Montgomery	223,000
240	550 Kearny	71,000
271	453 Grant	37,000
289	One Sansome	610,000
351	50 UN Plaza	60,000
3702	1155 Market	144,000
3705	Pacific III Apparel Mart	332,000
3715	141 Steuart	80,000
3717	101 Mission	214,000
3738	315 Howard	389,000
3803	China Basin Expansion	196,000
4991	S.F. Executive Park III	345,000
	TOTAL	3,113,000

SOURCE: Department of City Planning

TABLE C-2 (Revised): PROJECTED EFFECTS OF DOWNTOWN OFFICE DEVELOPMENT ON REGIONAL HOUSING MARKETS, 1980-85

	Residency of S.F. Office Employees*	Net Project Demand in 1985	Cumulative Demand 1979 to 1985**		Net Housing Stock Growth 1980-1985***	Project Demand as % of Growth 1980 to 1985****
	Percent	No. Households**	No. Emp.	No. Households	No. Units	Percent
San Francisco	40	160	15,700	8,700	5,000 to 8,000	2.0 to 3.2
Peninsula (San Mateo and Santa Clara Cos.)	18	100	7,100	5,400	75,000	0.1
East Bay (Alameda and Contra Costa Cos.)	30	165	11,800	9,100	41,000	0.4
North Bay (Marin and Sonoma Cos.)	12	65	4,700	3,600	25,000	0.3
TOTAL	100	490	39,300	26,800	146,000 to 149,000	0.3

* Weighted average of expected employees in Federal Reserve Bank (EE 78.207), 101 California Street (EE 78.27), Pacific Gateway, (EE 78.61), and Crocker National Bank (EE 78.298), from 456 Montgomery Street Final EIR (EE 78.178), p. 167.

** Housing demand is based on the assumption that the housing requirement formula for new office development contained in "Office/Housing Production Program (OHPP) Interim Guidelines" (January 1982) reflects the actual demand for housing in San Francisco. The same formula was applied to the other counties except the number of workers per household is assumed to be 1.3 based on 1980 Census data. Cumulative demand is based on a list of projects available for public review at the Office of Environmental Review, 450 McAllister Street, 5th Floor, San Francisco, California.

*** San Francisco growth estimates are based on ABAG, January 1980, San Francisco Bay Area Housing Activity Report, Number 2, and on Mary Schlosser, Research Analyst, Population Research Unit, California Department of Finance, telephone communication, August 13, 1980. Other housing market estimates are based solely on Department of Finance data. Growth rates are based on averaged rates (San Francisco 0.4%, Peninsula 2.2%, East Bay 1.2%, North Bay, 2.5%).

**** This column is based solely on the project's demand. Demand due to other office developments, immigration, and other regional housing demand factors would tend to further constrict the supply of regional housing available to households resulting from this project.

SOURCE: Environmental Science Associates, Inc.

TABLE C-3: HOUSING AFFORDABILITY BY HOUSEHOLD INCOME

Gross Annual Income Per Household or Per Individual	Maximum Affordable Monthly Housing Expenditure*	Housing Cost and Type of Unit			
		Monthly Cost**	Type of Unit	(Price)	Source
$5,000	$125				
8,300 (a)	208				
10,000	250				
10,680	267	$267 -	Census Median Rent		(e1)
11,560	289	289 -	Studio Apartments		(f1)
15,000	375				
18,200	455	455 -	Median Rent, All Units		(f2)
20,000	500				
23,520	588	588 -	Rent, 3+ Bedroom Units		(f3)
25,000 (b)	625				
27,300 (c)	683				
30,000 (b)	750				
35,000	875				
40,000	1,000				
40,880	1,022	1,022 -	Lowest House Price	($95,000)	(g1)
45,000	1,125	1,125 -	Census Median Value	(104,600)	(e2)
50,000	1,250				
52,560 (d)	1,314				
55,000	1,375				
65,080	1,627	1,627 -	Median House Price	(151,203)	(g2)
≀					
101,880	2,547	2,547 -	Highest House Price	(236,750)	(g3)
≀					
300,000 (d)	7,500				

See following page for references.

TABLE C-3: HOUSING AFFORDABILITY BY HOUSEHOLD INCOME (continued)

* The Office/Housing Production Program (OHPP) Interim Guidelines (January, 1982) define affordable housing as follows:
rental expenses not exceeding 30% of gross monthly income, adjusted for family size; and home ownership expenses not exceeding 38% of gross monthly income, adjusted for family size, including mortgage payments, property taxes, insurance, and/or homeownership association dues.
For the purpose of this table, 30% of gross monthly income is used to calculate housing affordability for both renters and owners. For owners it is assumed that 8% of gross monthly income would cover property taxes, insurance, and/or homeownership association dues and other related expenses. No adjustment has been made for family size because family circumstances vary widely.

** Monthly housing costs refer to rents and mortgage payments for the housing prices shown in parentheses; sources of rents and house prices are as footnoted. Monthly costs of ownership housing were calculated as monthly mortgage expenses assuming 20% down payment, 30-year mortgage, and 16% interest rate, not including insurance, property taxes, and other related housing costs.

a. U.S. Bureau of Labor Statistics, March, 1981, "Area wage survey for the San Francisco-Oakland, California Metropolitan Area." $8,300 was the mean 1980 income of inexperienced file clerks, one of the lowest-paid office occupations listed.

b. The range of $25,000 to $30,000 is assumed to approximate the median annual income of project employees (see discussion of Income, Section IV. D.).

c. The $27,300 income figure was derived by inflating the $16,300 median income of downtown office workers from the 1974 SPUR survey through December, 1981 by 67% using U.S. Bureau of Labor Statistics national wage information for nonsupervisory finance, insurance, and real estate sector employees since 1974.

d. Montgomery-Washington Building FEIR, 81.104E, certified January 28, 1982. The median salary of wage earners at 601 Montgomery St. was estimated to be $52,560 and the highest salary for corporate officers $300,000, according to a 1981 survey.

e. City Planning and Information Services, "1980 Census Information," March 1982:
1. median rent 2. median noncondominium housing value
Rental data include residential hotels whose rent levels may be substantially lower than other types of rental dwellings and may therefore have an effect on the median rent.

f. Department of City Planning, "Rent Survey," 1980. Median rents are for:
1. studio apartments 2. all units 3. 3+ bedrooms
These data are based on a small nonrandom sample of newspaper ads and may not reflect true rental costs.

g. San Francisco Board of Realtors, "Multiple Sales Service," October 5, 1981. (Annual data on housing sales prices including all homes sold from February 11, 1981 to October 1, 1981):
1. lowest price 2. median price 3. highest price

SOURCE: Environmental Science Associates, Inc.

TABLE D-1: VEHICULAR LEVELS OF SERVICE

Level of Service	Description	Volume/Capacity* (v/c) Ratio
A	Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.	less than 0.60
B	Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.	0.61-0.70
C	Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.	0.71-0.80
D	Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.	0.81-0.90
E	Capacity occurs at level of service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting up-stream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operation can generally be described as poor.	0.91-1.00
F	Level of service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.	1.00+

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* Capacity is defined as Level of Service E.

SOURCE: San Francisco Department of Public Works, Traffic Division, Bureau of Engineering

TABLE D-2: ESTIMATED EXISTING VEHICLE TRAFFIC VOLUMES IN PROJECT VICINITY*

Street Hours	Section	24 Hour	P.M. Peak Hour**	Max 8-Hrs.
Washington	Sansome-Montgomery	11,300	1,000	6,440
Montgomery	Washington-Clay	16,400	1,200	9,350
Clay	Front-Davis	18,200	1,330	10,370
Sansome	Pacific-Broadway	7,900	1,050	4,500

* The traffic volume data shown are derived from historical data for 1976, 1978, and 1979, obtained from the San Francisco Department of Public Works, Bureau of Traffic Engineering. Estimates of some 1981 traffic volumes were made by TJKM based on manual intersection count data collected by TJKM on 16, and 20-22 July 1981, and on the historical data for 1976, 1978, and 1979.

** Peak hour is the single peak hour during the peak period between 4:00 and 6:00 p.m.

SOURCE: TJKM, Transportation Consultants

TABLE D-3: ESTIMATED EXISTING PEAK-HOUR VOLUME-TO-CAPACITY RATIOS IN PROJECT VICINITY

Intersection	Ratio*	Level of Service**
Montgomery, Washington & Columbus	0.81	D
Montgomery and Clay	0.72	C
Kearny and Clay	0.78	C
Broadway and Sansome	0.51	A
Clay and Front	0.62	B

*Volume/capacity, where capacity is at Level of Service E

**See Table A-4, p. 36 for definitions of Levels of Service

SOURCE: TJKM, Transportation Consultants

TABLE D-4: PEDESTRIAN FLOW REGIMEN

Flow Regime	Walking Speed Choice	Conflicts	Flow Rate (P/F/M)*	
			Average	Platoon**
Open	Free Selection	None	0.5	0.5
Unimpeded	Some Selection	Minor	0.5-2	
Impeded	Some Selection	High Indirect Interaction	2-6	0.5-6
Constrained	Some Restriction	Multiple	6-10	6-10
Crowded	Restricted	High Probability	10-14	10-4
Congested	All Reduced	Frequent	14-18	14-18
Jammed**	Shuffle Only	Unavoidable	18	

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* P/F/M = Pedestrians per foot of sidewalk width per minute.
** Platoon movements are groups of pedestrians moving at the same rate.
*** For Jammed Flow, the (attempted) flow rate degrades to zero at complete breakdown.

SOURCE: Pushkarev, Boris and Jeffery M. Zupan, Urban Space for Pedestrians, Cambridge, MA. MIT Press, 1975.

TABLE D-5: EXISTING PEAK HOUR TRANSIT RIDERSHIPS AND CAPACITIES
(Selected Routes; Peak Direction Only)

			Capacity+		% Occupancy		
	Riders	Vehicles	Seated	Total	Seated	Total	Peak
BART*							
TransBay	10,500	122*	8,780	13,180	120	80	p.m.
San Francisco	6,360	89*	6,410	9,610	99	66	p.m.
A-C Transit**	9,130	199	9,990	12,490	91	73	p.m.
SamTrans**	970	18	850	1,060	115	91	p.m.
So. Pacific RR	4,395	9***	11,000	11,000	40	40	p.m.
Golden Gate Transit							
Motor Coach	5,050	122	5,470	6,710	92	75	a.m.
Ferry	1,070	3	1,420	2,075	75	52	p.m.

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*BART data is on a per car basis. Fourteen trains ran in each direction in the peak hour. Eastbound there were 7 Concord trains (average 10 cars per train); 4 Fremont trains (average 10 cars per train); and 3 Richmond trains (average 4 cars per train

** SamTrans: 7F, 7B, 5M, 7R;

A-C Transit: A,B,BX,C,CH/CB,E,EX,F,FSG/FX,G,H,K,KH,L,LX,N,NX,O,OX,R/RH,RD/RF/RCV,S,SW,V,W,Y.

***Number of trains assuming 10 cars per train to reflect available rolling stock and mix of car capacities. Actual number of cars per train is less than 10.

+Capacity has been calculated based on the following per-vehicle capacities:

	Seated Passengers	Total Seated and Standing Passengers
BART	72	108
A-C Transit	48	60
SamTrans	47	59
Southern Pacific(two types of cars)	100/150	100/150
Golden Gate Transit Motor Coach	45	55
Sausalito Ferry	400	575
Larkspur Ferry	510	750

SOURCE: TJKM, Transportation Consultants

TABLE D-6: BUILDINGS INCLUDED IN THE CUMULATIVE ANALYSIS

The buildings which were elements of the cumulative transportation analysis are in or near the Downtown Business district and are listed below by their Office of Environmental Review file number and name.

74.253	444 Market: Shaklee
74.164	Pacific Bldg. III - Apparel Mart
77.256	Levi's Plaza
78.27	101 California St.
78.207	Federal Reserve Bank
78.298	1 Montgomery: Crocker Tower
78.334	1 Sansome
78.413	150 Spear Street
	Embarcadero 4
79.57	DAON Building (Battery & Sacramento)
79.169	The Pacific Lumber Bldg. (Washington & Sansome)
79.178	456 Montgomery
79.196	315 Howard
78.61	Pacific Gateway
80.26	101 Montgomery*
80.268	Five Fremont Center*
79.236	101 Mission*
80.171	Hotel Ramada*
79.257	Tower II, Hilton Hotel*
79.283	Holiday Inn*
80.57	25 Jessie St *
80.355	Hunt/Knight Building PDEIR*
80.339	San Francisco Federal Savings Building PDEIR*
81.104	Montgomery-Washington Building
	1155 Mkt*
	China Basin*
	Spear/Main*
	135 Main* 81.61
	Mission/Main* 81.183E
	2nd & Folsom* 81.18

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*Not on Attachment 2 to Guidelines for Environmental Review, Transportation Impacts list of cumulative proposed projects, but included at request of Office of Environmental Review, San Francisco Department of City Planning.

SOURCE: TJKM

TABLE D-6a: BUILDINGS INCLUDED IN THE CUMULATIVE TRANSPORTATION ANALYSIS - PROPOSED PROJECTS

Project Name

Francisco Place
1299 Sansome
955 Front
Columbus/Pacific
580 California
388 Market
466 Bush
222 Kearny
747 Post
1361 Bush
Franklin/McAllister
1151 Market
1049 Market
90 New Montgomery
562 Mission
109 Mission
832 Folsom
201 Spear
Welsh Commons, 4th and Bryant
548 5th
650 7th Street (C)
625 2nd (C)
123 Townsend
Ferry Building
Agriculture Building
847 Sansome
750 Battery
139 Battery
250 Montgomery
Sloane Bldg. (C)
1170-1172 Market
466 Clementina (C)
744 Tehama
95 Hawthorne (C)
480 2nd (C)
252 Townsend (C)
901 Montgomery
Golden Gateway III
550 Kearny
50 UN Plaza
YBC West

Project Name

Ice House Conversion (C)
50 Osgood Place
569 Sacramento (C)
333 California
122 Battery
Russ Tower Addition
333 Bush
980 Market
Polk/O'Farrell
435-37 Monterey
Van Ness Plaza
5th/Market
71 Stevenson
Central Plaza
144 2nd Street (C)
UCB Bank Expansion
401 6th
539 Bryant (C)
Greyhound Bus Terminal
655 5th
615 Townsend (C)
Pier One Development
Mirawa Center/Grant and Pacific
222 Front (C)
401 Washington
160 Sansome
453 Grant
44 Campton Pl.
291 10th (C)
121 Steuart
Holland Ct. (C)
868 Folsom
490 2nd (C)
388-340 Brannan (C)
690 2nd (C)
936 Montgomery
736 Montgomery
50 Grant
1625 Van Ness (C)
Opera Plaza
141 Steuart
Gift Mart

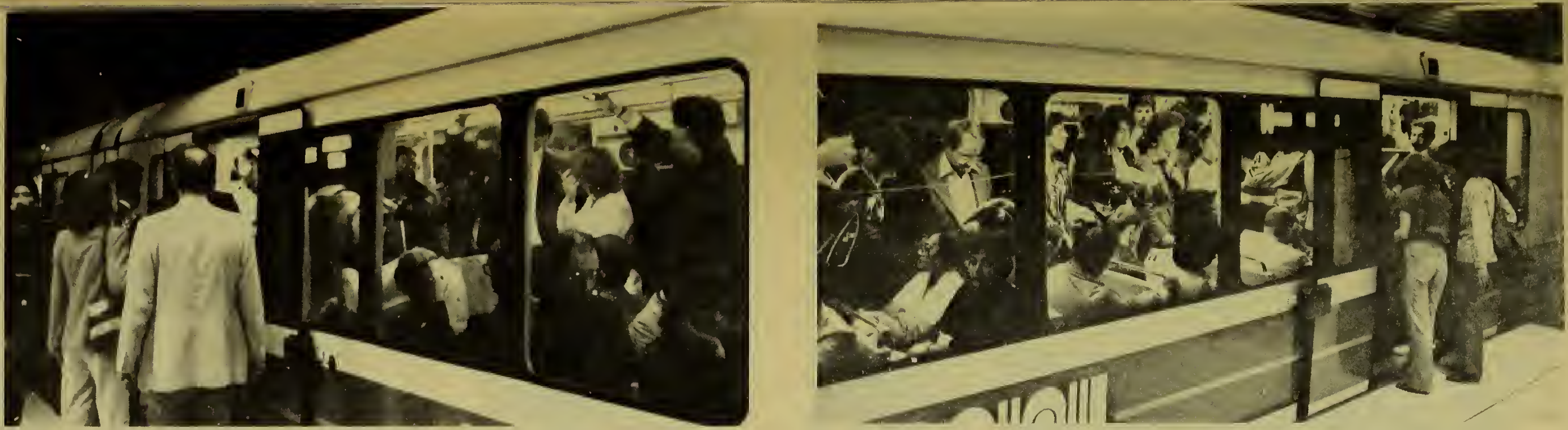
(C) - Conversion from previous use to office building.

SOURCE: Department of City Planning

TABLE D-7: PROJECTED 1984 P.M. PEAK-HOUR (4:30-5:30) OUTBOUND MUNI ANALYSIS

	1984 Base			1984 Base + Project		
Line	1984 Capacity	Riders	Total Load Factor	Riders	Total Load Factor	Project Load Factor
1	450	559	1.24	561	1.25	0.01
1X	750	825	1.10	828	1.10	0.00
2	600	803	1.34	806	1.34	0.00
3	525	714	1.36	716	1.36	0.00
4	375	371	0.99	372	0.99	-
5	1275	1,397	1.10	1,401	1.10	0.00
6	675	708	1.05	710	1.05	0.00
7	450	465	1.03	466	1.04	0.00
8	1125	931	0.83	934	0.83	-
9	750	719	0.96	721	0.96	-
11	750	955	1.27	958	1.28	0.01
12	525	690	1.31	692	1.32	0.01
14	1275	1,722	1.35	1,727	1.35	0.00
14GL	300	360	1.20	361	1.20	0.00
14X	675	927	1.37	930	1.38	0.01
15	975	816	1.09	818	1.09	0.00
17X	324	362	.97	363	0.97	-
21	825	935	1.13	938	1.14	0.01
27	300	219	0.73	220	0.73	-
30	1425	1,429	1.00	1,434	1.01	0.01
30X	975	1,102	1.13	1,106	1.13	0.00
31	525	700	1.33	702	1.34	0.01
31X	675	786	1.16	789	1.17	0.01
38	1125	1,389	1.23	1,393	1.24	0.01
38L	675	919	1.36	922	1.37	0.01
38AX	600	732	1.22	734	1.22	0.00
38BX	300	344	1.15	345	1.15	0.00
42	300	326	1.09	327	1.09	0.00
45	675	805	1.19	808	1.20	0.01
55	1650	1,825	1.11	1,859	1.11	0.00
66	232	269	0.72	270	0.72	-
71	375	536	1.43	538	1.43	0.00
72	300	390	1.30	391	1.30	0.00
80X	600	594	0.99	596	0.99	-
J	1235	1,114	0.90	1,118	0.90	-
K	3900	4,356	1.12	4,370	1.12	0.00
N	2400	2,845	1.19	2,854	1.19	0.00
Total	30,855	34,966	1.13	35,079	1.14	0.01

SOURCE: SF DCP and TJKM, Transportation Consultants

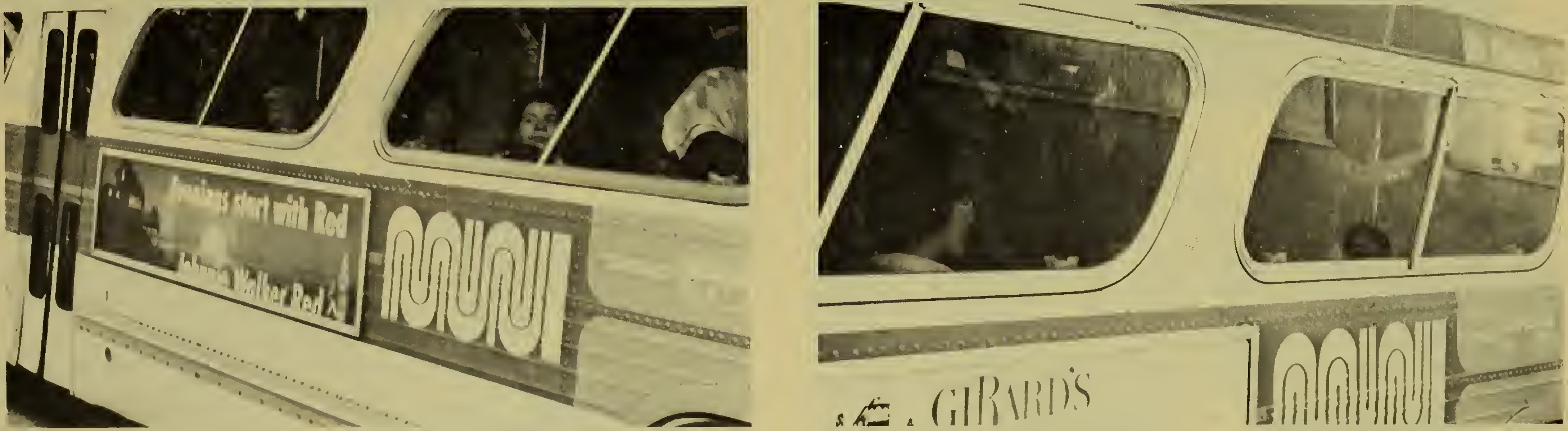


K Ingleside - Van Ness Station

Wednesday, September 9, 1981 - 8:00 A.M. - Inbound

N Judah - Van Ness Station

Wednesday, September 16, 1981 - 5:00 P.M. - Outbound



38 Geary - Van Ness Ave. and O'Farrell St.

Wednesday, October 21, 1981 - 9:00 A.M. - Inbound

38 Geary - Van Ness Ave. and Geary Blvd.

Wednesday, October 21, 1981 - 4:20 P.M. - Outbound

SOURCE: Environmental Science Associates, Inc.

FIGURE D-8 Photographs of Peak Muni Loading Conditions

11 Hoffman - Mission St. and S. Van Ness Ave.

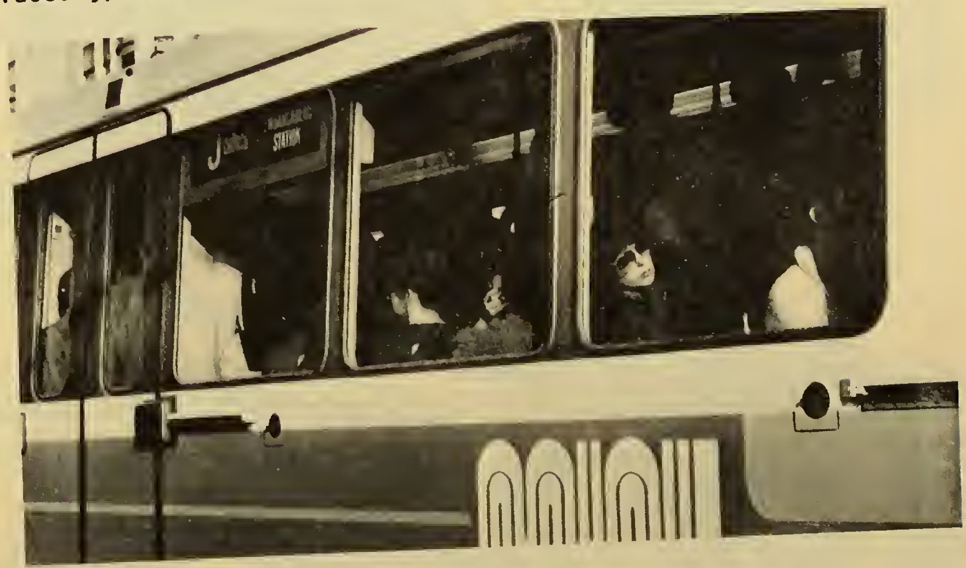
Wednesday, October 21, 1981 - 8:10 A.M. - Inbound

11 Hoffman - Mission St. and S. Van Ness Ave.

Tuesday, September 29, 1981 - 5:10 P.M. - Outbound

30X Marina Express - Bayshore Ave. and Arleta Ave.

Wednesday, October 7, 1981 - 8:00 A.M. - Inbound

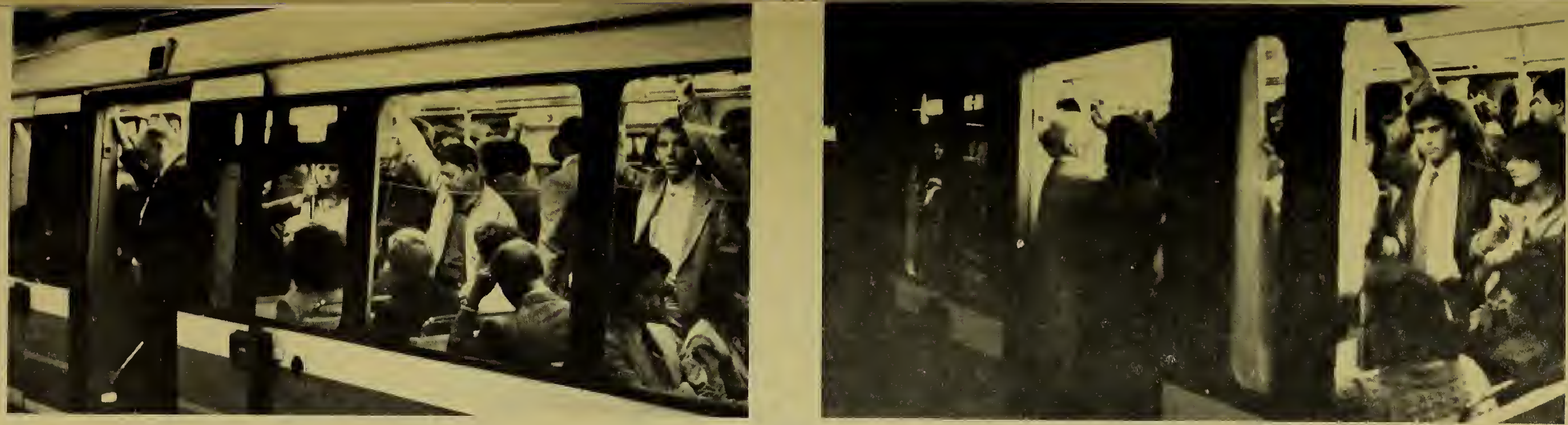


J Church - Church St. and Duboce Ave.

Tuesday, September 29, 1981 - 9:00 A.M. - Outbound

SOURCE: Environmental Science Associates, Inc.

FIGURE D-8 (continued) Photographs of Peak Muni Loading Conditions

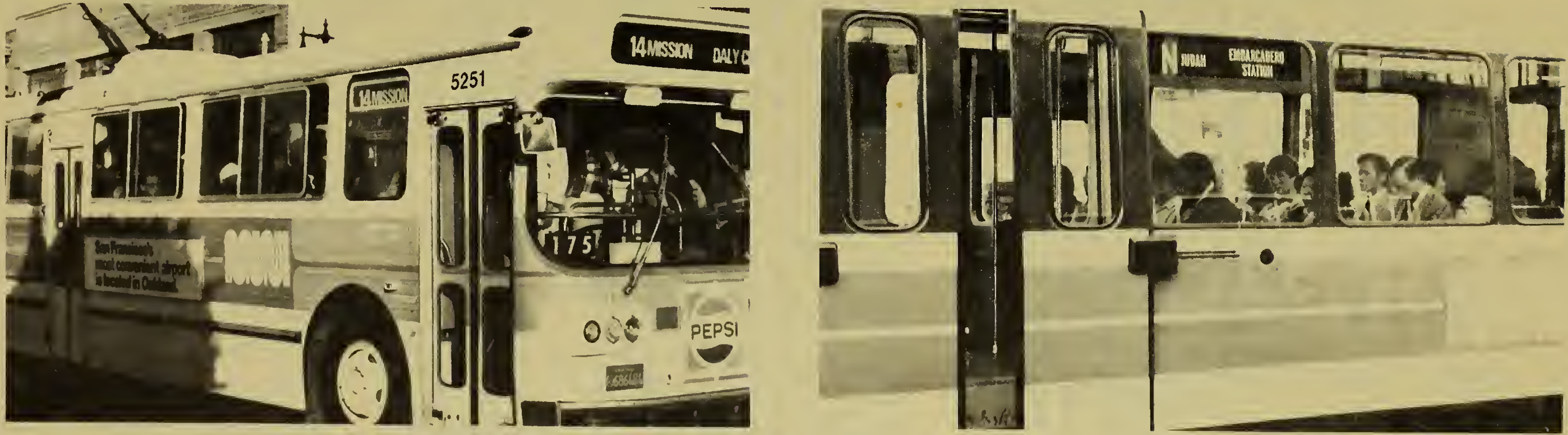


M Ocean View – Civic Center Station

Wednesday, September 9, 1981 – 8:20 A.M. – Inbound

L Taraval – Van Ness Station

Wednesday, September 16, 1981 – 4:50 P.M. – Outbound



14 Mission – Mission St. and S. Van Ness Ave.

Tuesday, September 29, 1981 – 5:45 P.M. – Outbound

N Judah – Irving St. and Ninth Ave.

Tuesday, September 29, 1981 – 8:20 A.M. – Inbound

SOURCE: Environmental Science Associates, Inc.

FIGURE D-8 Photographs of Peak Muni Loading Conditions
(continued)

APPENDIX E: AIR QUALITY

TABLE E-1: SAN FRANCISCO AIR QUALITY

Meteorological characteristics such as wind patterns and thermal inversions determine the movement and dispersion of air pollutants. The prevailing wind directions in San Francisco are from the west and northwest. Wind frequencies and speeds are generally highest in the summer. Light-variable (calm) wind conditions occur approximately 25 percent of the time on an annual basis. A thermal inversion (an inverted vertical temperature structure of the atmosphere consisting of warm air above cool air) is a stable atmospheric condition that inhibits the upward dispersion of air pollutants and traps them in a layer near the ground. High-altitude subsidence inversions, associated with warm descending air in a high-pressure cell which may last for seveal days, occur most of the time in summer and fall. Low-altitude radiation inversions, caused by radiation of heat from the earth's surface into cold nighttime air and usually dissipating by noon, occur most of the time in winter.

Much of San Francisco is generally upwind of major pollutant sources such as industrial areas, airports, freeways and other urban activities. San Francisco is more a contributor to its own air quality problems (especially local pollutants such as carbon monoxide and particulate) and to those in other parts of the Bay Area (especially ozone, or oxidant, which is a regional pollutant formed by a series of photochemical reactions involving hydrocarbons and nitrogen oxides over a period of several hours), than a recipient of pollutants from other areas. When atmospheric stagnation occurs (as the result of light-variable wind conditions coupled with thermal inversions, most commonly in the fall and winter), the potential exists for the entire Bay Area Air Basin to experience concentrations of pollutants that exceed applicable standards. Thus, air quality is both a local and regional problem.

The BAAQMD monitoring station is located east of Potrero Hill at 900 23rd Street. While measurements there indicate daily, seasonal, and annual meteorological and air quality trends, it is not clear how well the measurements represent conditions at street level near the station or elsewhere in the City.

SOURCE: Environmental Sciences Associates,. Inc.

TABLE E-2: SAN FRANCISCO AIR POLLUTANT SUMMARY 1978-1980

STATIONS: 939 Ellis Street and 900 23rd Street, San Francisco*

POLLUTANT:	STANDARD	1978	1979	1980*
OZONE (O_3) (Oxidant)				
1-hour concentration (ppm /a/)				
Highest hourly average	(0.08) 0.12 /b,c/	0.11	0.08	0.09
Number of standard excesses		(4) 0	0	0
Expected Annual Excess/c/		0.3	0.0	0.0
CARBON MONOXIDE (CO)				
1-hour concentration (ppm)				
Highest hourly average	35 /b/	17	20	10
Number of standard excesses		0	0	0
8-hour concentration (ppm)				
Highest 8-hour average	9 /b/	9.4	13.8	7.5
Number of standard excesses		1	2	0
NITROGEN DIOXIDE (NO_2)				
1-hour concentration (ppm)				
Highest hourly average	0.25 /d/	0.30	0.16	0.17
Number of standard excesses		4	0	0
SULFUR DIOXIDE (SO_2)				
24-hour concentration (ppm)				
Highest 24-hour average	0.05 /d/	0.024	0.034	0.018
Number of standard excesses/e,f/		0	0	0

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* In January 1980 all of the pollutant-monitoring functions of the 939 Ellis St. Station were transferred to the 900 23rd St. Station.

/a/ ppm: parts per million.

/b/ National standard, not to be exceeded more than once per year (except for annual standards which are not to be exceeded).

/c/ The national ozone standard was revised from 0.08 ppm to 0.12 ppm in January 1979. The number of excesses shown in parentheses is of the old 0.08 ppm standard in effect at the time. Expected Annual Excess is a three-year average of annual excesses of the new 0.12 ppm standard.

/d/ California standard, not to be equaled or exceeded.

/e/ The sulfur dioxide standard is considered to be exceeded only if there is a concurrent excess of the state ozone or suspended particulate standards at the same station. Otherwise, the national standard of 0.14 ppm applies.

/f/ Number of observed excess days (measurements taken once every six days).

/g/ ug/m^3: micrograms per cubic meter.

SOURCE: BAAQMD, 1978 - 1980, Contaminant and Weather Summaries.

TABLE E-2: SAN FRANCISCO AIR POLLUTANT SUMMARY 1978-1980 (Continued)

STATIONS: 939 Ellis Street and 900 23rd Street, San Francisco*

POLLUTANT:	STANDARD	1978	1979	1980*
TOTAL SUSPENDED PARTICULATE (TSP)				
24-hour concentration (ug/m3 /g/)				
Highest 24-hour average	100 /d/	128	117	173
Number of standard excesses/f/		1	1	6
Annual concentration (ug/m3)				
Annual Geometric Mean	60 /d/	42	42	52
Annual standard excess		No	No	No

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* In January 1980 all of the pollutant-monitoring functions of the 939 Ellis St. Station were transferred to the 900 23rd St. Station.

/a/ ppm: parts per million.

/b/ National standard, not to be exceeded more than once per year (except for annual standards which are not to be exceeded).

/c/ The national ozone standard was revised from 0.08 ppm to 0.12 ppm in January 1979. The number of excesses shown in parentheses is of the old 0.08 ppm standard in effect at the time. Expected Annual Excess is a three-year average of annual excesses of the new 0.12 ppm standard.

/d/ California standard, not to be equaled or exceeded.

/e/ The sulfur dioxide standard is considered to be exceeded only if there is a concurrent excess of the state ozone or suspended particulate standards at the same station. Otherwise, the national standard of 0.14 ppm applies.

/f/ Number of observed excess days (measurements taken once every six days).

/g/ ug/m3: micrograms per cubic meter.

SOURCE: BAAQMD, 1978 - 1980, Contaminant and Weather Summaries.

APPENDIX F: NOISE

TABLE F-1: TYPICAL CONSTRUCTION NOISE LEVELS AT 50 FEET

Construction Phase	Average Noise Level
Ground clearing	84 dBA
Excavation	89
Foundation	78
Erection	87
Finishing	89

SOURCE: D.N. May, Ph.D., Noise Assessment Handbook, Von Nostrand Reinhold, Environmental Engineering Series, page 211.

APPENDIX G: ENERGY

TABLE G-1: BUILDINGS INCLUDED IN THE COMPARATIVE ENERGY ANALYSIS

Downtown buildings which were used in the comparative energy analysis are listed below by their Office of Environmental Review EIR file number and name.

78.61	Pacific Gateway
78.27	101 California
78.207	Federal Reserve Bank
78.298	1 Montgomery (Crocker Tower)
79.57	DAON Building (Battery & Sacramento)
79.178	456 Montgomery
79.236	101 Mission
80.26	101 Montgomery
80.268	Five Fremont Center
80.349	Spear/Main

SOURCE: Environmental Science Associates, Inc.